CITY OF MERCER ISLAND DEVELOPMENT SERVICES GROUP 9611 SE 36TH STREET | MERCER ISLAND, WA 98041



INS	PECTION REQUESTS
	MyBuildingPermit.com
voice	mail:

PHONE: 206.275.7605 www.mercergov.org		to Filler	
MePlan	१ वडमा	N	voicemail: (206) 275-7730
NOTE: ALL RECORDS AND DRAWINGS ARE SUBJECT	TO PUB	LIC	DISCLOSURE AS REQUIRED BY RCW 42.56
CONTACT INFORMATION:			
Applicant is to complete the following information. Applicant Contact information prior to permit issuance:		_	pplicant Contact information post permit issuance:
1-0-1-5			
Name: NED NELSON		A	ame:
Address: 1177350HUKE 1)ZI	VA	diress.
Phone: 425-444.67	92	P	none:
	AC IN	6	· ••••
Email: Nednesone W	וווכן	E	nall!
The owner is responsible for hiring an approved private Spe Inspectors (except Geotechnical) must be WABO certified. When Special Inspection or Structural Observation is required	ecial Inspe d, the repo d in addition	cto ort:	Inspections or Structural Observation (check items below). If or the checked inspections noted below. All Special shall be submitted to the City Building Inspector prior to the C to the Special Inspection or Structural Observation indicated
STRUCTURAL OBSERVATION BY ENGINEER OF RECORD (Engineer of Record:		v:	Phone:
General Conformance to Construction Documents			Other:
SOILS / GEOTECHNICAL:			
Special Inspector:	_ Compan	y:_	Phone:
Erosion control measures			Subsurface drainage placement
Shoring installation and monitoring Observe and monitor excavation			Verify fill material and compaction Rockery installation
 Verification of soil bearing 			Pile placement (auger cast/driven pile)
Other:			Other:
REINFORCED CONCRETE: Special Inspector:	Compan		Phone:
Concrete strength			Retaining wall construction
Reinforcing steel and concrete placement			Prestressed / Precast construction
☐ Shotcrete placement ☐ Other:			Other:
STRUCTURAL STEEL: (AISC 360, Chapter N)		Land	/
	Compan	y:	Phone:
Fabrication and shop welds			Moment Frame construction
 Structural steel erection, field welds and bolting Other: 			Other:
STRUCTURAL MASONRY:		Lanad	
Special Inspector:	Compan	y:_	Phone:
☐ Mortar strength ☐ Masonry unit strength			Glass unit masonry installation
☐ Masonry unit strength ☐ Other:			Wall panel and veneer installation Other:
Other:			Other:
WOOD:			
Special Inspector / Engineer of Record:	Compan	v.	Phone:
☐ Lateral resisting system construction	Compan		High strength diaphragm construction
Other:			Other:
OTHER SPECIAL INSPECTIONS:			
Special Inspector:	_ Compan		Stucco installation
Epoxy grout installations			Infiltration System
Expansion anchor installations			Exterior Insulation Finish System (EIFS) installation Other:
Other post installed anchors			
			Other:
Other post installed anchors Alternative construction methods: Alternative construction materials:	shop draw		Other:
☐ Other post installed anchors ☐ Alternative construction methods: ☐ Alternative construction materials: The Applicant is required to select all deferred submittals / sabrication / construction.	49		Other: s for submittal to the City for review and approval prior to it
Other post installed anchors Alternative construction methods: Alternative construction materials: The Applicant is required to select all deferred submittals / sabrication / construction. Connector plate wood trusses	- 49		Other: s for submittal to the City for review and approval prior to it Post tension layout
☐ Other post installed anchors ☐ Alternative construction methods: ☐ Alternative construction materials: The Applicant is required to select all deferred submittals / sabrication / construction. ☐ Connector plate wood trusses ☐ Metal joist / metal trusses ☐ Premanufactured structures (stairs, etc.)			Other: s for submittal to the City for review and approval prior to it
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□ Other post installed anchors □ Alternative construction methods: □ Alternative construction materials: The Applicant is required to select all deferred submittals / stabication / construction. □ Connector plate wood trusses □ Metal joist / metal trusses □ Premanufactured structures (stairs, etc.) □ Precast concrete elements □ Other: Indicate where the following information is located in the disprescriptive Compliance (RECPC) Form into the drawing set. Sheet: □ Building envelope: WSEC Table 402.1.1 (Include U-factors, insulation and moisture control) □ Whole house ventilation: WE Section MSECON WA Amended (Include ventilation option and duct sizing if applicable)	rawing set	A	Other: s for submittal to the City for review and approval prior to it Post tension layout Exterior cladding Window wall / curtain wall construction Other: Other: ternatively, incorporate or include the Residential Energy Co Air Leakage Testing. MC Section RADZ 6.3.2 WAA Amendments Of Provide air leakage test report verifying air leakage rate does not to exceed 5 air changes per hour. Duct Leakage Testing. WEST RADZ 2.2
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V		nd. Approved plans must b	e kept o		the approved project plans is allowed without price maintained in good condition.
	Site Considerations Hours of Work Construction Vehicle Parkin Acess Road Requirements Refer to "Preconstruction Meet Temporary site address with m Erosion control measures must prior to the start of any site wo	ROW rest Drainage Sewer Res Water Set Seting Checklist" provided at t Inimum 6" high numbers vi be as shown on approved rk.	trictions Requirer quireme rvice Rec the prece isible fro project o	nents nts purements onstruction in the street rawings. A	ulred construction rules and regulations, including
	EDROYECTON AFOL	HREMENTS:			
	must remain in place throughor No trees shall be cut without a Replacement trees must be a m For this project, N/A tree	ut the project. City of Mercer Island tree p ninimum of six feet tall at in as are authorized to be rem in a protected eagle nest ar	permit. Installation	n. They mu I replaced	oline prior to start of any site work and ust be planted and approved prior to final inspecti with N/A trees. If Fish and Wildlife at (360) 534-9304 or visit their
Sepa	rate Permits are required for ALI	fire protection systems. For	or more	nformatio	n, see http://www.mercergov.org/Page.asp?NavID=;
	Fire Sprinkler			101110000000000000000000000000000000000	d Household
	☐ NFPA 13D			Fire Alarn	n per NFPA 72
	Plus			Monito	ored SprinklerFlow Alarm
	☐ NFPA 13R			Other:	Flow Alaim
	Approved Fire Code Alternative FCA1	c·			
	LJFCAZ			FCA4	
	Fire sprinkler design calculation	EIVIENTS:			
M	☐ City Installation. ☐ Applicant Installation. Required Service Line Size: (water main to meter) Abandonment of existing servic Pressure reducing valve require Reduced pressure backflow assoriake irrigation). Additional water supply require	e and meter required at ma ed if pressure exceeds 80 ps embly (RPBA) required for a	ain. il. all lots w	ith waterfi	ront or non-city water supply (private wells
Dire	NN AGE REQUIREMEN	ITS:			
	On site detention system requir	ed	□	Direct dis	charge into the lake
	On site infiltration system requi	red		No Storm	charge into the lake. Water permit required. on to public storm drainage conveyance system re
	As-built Utility drawings require Full Size drawings required.	:d.	_ 8	Connection Other:	on to public storm drainage conveyance system re
M	Side sewer requires a backflow	preventer when connectin	g to the	ake line o	when the elevation of the lowest plumbing fixtur
	lower than the elevation of the Video tape of existing sewer re- New connection.	upstream manhole rim or	when sic s)	e sewer is	shared with one or more properties. t permit required. Reconnect permit required
	Other:	connected to the lake line	Transaction of the Contraction		
				need to so	chedule three (3) days in advance with the City of
e fair		nce Department at (206) 27		need to so	thedule three (3) days in advance with the City of
Code	Mercer Island Maintenar alternatives must be Inspected.	nce Department at (206) 27	ecklist		chedule three (3) days in advance with the City of
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Code	Mercer Island Maintenar alternatives must be Inspected. CA1: yor shall verify points chosen fo	nce Department at (206) 27 Refer to the Inspection Che r height calculations and pore	ecklist	CA2:	thedule three (3) days in advance with the City of the City foundation is buildings must be surveyed onto the lot. The City for Certificate of Occupancy.
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PECTIONS: (Listed ctor Date Ap	ility to apply for and obtain all City of Merc	proved. Note: Items marked with an "*" require a separate permit. It is the eer Island permits.	
	n order of typical sequencing) proved		
	Pre-construction Meeting to Review Cond	ditions of Permit Approval.	
*	Tree protection		
	Erosion control		
	Sewer disconnect and cap. If applicable, s		
	Right-of-way use or work / easement, ma separate ROW permit required	terial delivery, etc. if applicable,	
Г	Land clearing, grading and demolition		e e
	Temporary power		þe
	Pilings / Shoring / Shotcrete. If applicable,	, provide survey letter	ave.
	(property line); Geotechnical Engineer / S		l å.
	reports of inspections (pile and shoring in Footings, setbacks, UFER ground. If applic		ion
	(building height and setbacks); Special In:		pro
	(soil bearing capacity, compaction, earthy		ds us
	Foundation walls / concrete columns		ed
	Roof and footing drains		ed uir
	Foundation damproofing Storm drainage, including (but not limited		l pare
	Connections to storm	• Area drains	r all required inspections
	main in ROW	Conveyance piping / cleanouts	p fe
	Detention systems	Storm drain in ROW	J af
	Infiltration systems	· Control structures / manholes	issued after all required inspections have been performed and approved.
	Catch basins including	• Pump systems	Iss
	oil-water separator tees Water Service	Retaining wall drainage	
	Water Supply		
	Water as-built drawings		
	Side sewer installation, including (but not		
	Connections to side	• Back-flow valves	
	sewer main Connections to existing	Grinder pump systems Sewer manholes	01
	side sewer	Jewei manifoles	AV
	Driveway / Access road		-
	Underslab electrical / mechanical / plumb		
	Underslab insulation / vapor barrier / rein	ıforcing	4
	Underfloor framing Nailing-Roof sheathing. If applicable, prov	vide Special Inspection	And a
	letter for lateral wood inspection.	ide Special Inspection	
	Nailing-Exterior wall and Shearwall. If app	plicable, provide Special	0.00
	Inspection letter for lateral wood inspecti-		(AD)
	Rough hydronic installation		641
	Rough electric installation Rough fire alarm (wiring inspection)		Total
	Rough plumbing installation (DWV, water	1	
	Rough mechanical		
	Gas Piping		(A)
	Rough fire sprinkler / hydrostatic and flow		
	Framing and glazing. If applicable, provide lateral wood inspection, welding epoxy ar		V.)
П	Masonry construction (fireplace / walls / v		111
	Insulation installation		M.
🔲			F
	Shower pan (or tub)		
	Miscellaneous Code Alternative CA1:		M
	Code Alternative CA2:		
	Impact Fees Paid (If applicable)		\vee
H	Final Inspection: Tree Restoration	a (but not limited to)	
U	Final Inspection: Fire protection, including • Sprinkler	g (but not limited to): TF • Fuel Tank Installation	
	• Access Road	Fire Extinguishing System	6
	Fire Code Alternatives (see below)	Fire Alarm System	1889
	FCA1:	FCA3:	Per
	FCA2: Final Inspection: Water supply protection	FCA4:	I
LJ	backflow devices for:	n, including (but not limited to)	1
	Waterfront property	Well water on property	<u> </u>
	Fire / lawn sprinkler	• Boiler	U
	Final Inspection: Site and utility: includes		шш
	restoration complete and as-built drawing	gs ready for submittal.	35
O	Cincil in an authors Desilation for desilar all attacks	deal / machanical / nhumble = 16	() Eisons
	Final Inspection: Building, including electrapplicable, provide closeout (summary) le	The state of the s	A S
		The state of the s	28

HEADRICK RESIDENCE

8822 S.E. 62ND STREET, MERCER ISLAND, WA. 98040

PROJECT INFORMATION

ADDRESS: 8822 62ND STREET, MERCER ISLAND, WA 98040

TAX ID 865050-0040

(PERMIT # 1905-249 and CAO19-014) WAS DESIGNED AND PERMITTED UNDER THE OLD CRITICAL AREAS ORDINANCE

TREE REMOVAL:

NO NEW TREES ARE ANTICIPATED TO BE REMOVED AS PART OF PHASE 2. ALL TREES REQUIRING REMOVAL WERE REVIEWED AS PART OF PHASE 1; PERMIT # 1905-249

ENERGY ENVELOPE: SEE ENERGY SHEET A1.2 & A1.3

NOTE: AVERAGE BUILDING ELEVATION / ON SITE PLAN SHEET A2

NOTE: LOT SLOPE CALCULATION / ON SITE PLAN SHEET A2

NEW ONE STORY RESIDENCE WITH PARTIAL SECOND FLOOR BEDROOMS

- ATTACH TO NEW GARAGE PERMITTED UNDER PHASE 1 OF THIS PROJECT: #1905-249
- 1. DEMOLISH RESIDENCE, EXCEPT FOR FULL BASEMENT FOUNDATION WALLS
- 2. CONSTRUCT NEW RESIDENCE USING A COMBINATION OF EXISTING BASEMENT FOUNDATION AND NEW FOUNDATIONS
- 3. COMPLETE DECKING FROM RESIDENCE TO POOL

BUILDING CODES

REQUIRED CODES:

IRC 2018

BE ADDED FOR PHASE ONE & PHASE TWO COMPLETE).

SURVEY / ACCURACY STATEMENT:

AS-BUILT SURVEY NOTE:

- PRIOR TO FINAL INSPECTION AS-BUILT SURVEY
- AND HARDSCAPE SURVEY
- PROVIDE PROPERTY LINE / SETBACK SURVEY

ENERGY NOTES

- 1. WHOLE HOUSE VENTILATION: PROVIDE CONTINUOUSLY OPERATING HEAT RECOVERY VENTILATION SYSTEM. DUCTED SYSTEM SHALL DISTRIBUTE OUTSIDE AIR TO ALL HABITABLE ROOMS.
- 2. LOCAL EXHAUST: PROVIDE SOURCE SPECIFIC INTERMITTENT/CONTINUOUS VENTILATION AT KITCHEN, BATHS, AND LAUNDRY. PROVIDE REQUIRED CONTROLS AS APPLICABLE, BACK-DRAFT DAMPERS AND NOISE RATINGS SHALL NOT EXCEED 1.0 SONE RATING.
- 3. BUILDING AIR LEAKAGE: PROVIDE CONTINOUS AIR BARRIER. ALL EXTERIOR DOORS AND WINDOWS SHALL BE WEATHER-STRIPPED OR GASKETED AND SEALED. JOINTS AND OPENINGS IN ENVELOPE SHALL BE SEALED, CAULKED, ALL RECESS LIGHTING AT BUILDING ENVELOPE SHALL BE APPROVED FIXTURE AND INSTALLED WITH GASKETS OR SEALED. ENSURE ALL ELEC BOXES ETC SHALL BE GASKETED, SEALED OR CAULKED. AIR LEAKAGE SHALL CONFORM TO ENERGY FORMS ON SHEET A 1.2
- 4. INSULATION: FILL ALL CAVITIES. PROVIDE 1" MINIMUM AIR SPACE AT **EXTERIOR BATT INSULATION**
- 5. MOISTURE CONTROL: VAPOR BARRIER INSTALLED ON WARM SIDE OF INSULATION. PROVIDE VAPOR BARRIER AT NEW CRAWL SPACE AND/OR NEW CONCRETE SLAB ON GRADE.
- 6. DUCT TEST: AS APPLICABLE. COMPLETED CERTIFICATE SHALL BE POSTED PERMANENTLY AND PROIR TO FINAL INSPECTION.
- 7. WATER HEATER: EFFICIENT WATER HEATER, SEE SHEET A 1.2
- 8. THERMOSTAT: PROVIDE PROGRAMMABLE THERMOSTAT (7 DAY)
- 9. LIGHT FIXTURES: PROVIDE HIGH EFFICIENCY (LED LUMINAIRES) MINIMUM 75% OF TOTAL FIXTURES IN DWELLING UNIT.
- 10. SHOWERS / PLUMBING SHALL BE EQUIPPED WITH FLOW CONTROL DEVICES TO LIMIT TOTAL WATER FLOW RATE.
- 11. DRYER EXHAUST: VENT DRYER TO EXTERIOR. SIZE AND LENGTH CONFORM TO MFG RECOMMENDATION. PROVIDE BACKDRAFT DAMPER

OWNER: Greg & Jennifer Headrick / 8822 S.E. 62nd Street, Mercer Island, WA 98040

DESIGN CONSULTANTS

ARCHITECTURE: Ned Nelson, Architect / 11773 Sunrise Drive NE, Bainbridge Island, Washington 98110 425.444.6782 / nednelson@msn.com

STRUCTURAL: QUANTUM CONSULTING ENGINEERING / 1511 THIRD AVENUE SUITE 323, SEATTLE, WA 98101 206.957.3900 / 206.957.3901 fax

CIVIL: BUSH, ROED & HITCHINGS, INC. Ted Dimof, PE / Engineering Division Manager / Principal 2009 Minor Avenue East, Seattle, WA 98102

206.323.4144 / 206.720.3572 / tedd@brhinc.com

GEOTECHNICAL ENGINEER: GEOTECH CONSULTANTS / Robert Ward / 2401 10th Ave E, Seattle, WA 98102 425.747.5618 / geotech@geotechnw.com

SURVEYOR: TERRANE Edwin J.Green Jr. / 10801 Main Street, Suite 102, Bellevue, WA 98004 425.458.4488 / support@terrane.net

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AS-BUILT SURVEY NOTE:

PRIOR TO FINAL INSPECTION AS-BUILT SURVEY

- 1. PROVIDE IMPERVIOUS SURFACE, LOT COVERAGE, AND HARDSCAPE SURVEY
- 2. PROVIDE PROPERTY LINE / SETBACK SURVEY

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PROJECT INFORMATION

REVISED: 04-28-2022

REFERENCE FOR PHASE I: PHASE I PERMIT #1905-249 CAO 19-014

ZONING: R-9.6 8000 SF GFA ALLOWED.

AREA SUMMARY, LOT COVERAGE, GROSS FLOOR AREA & HARDSCAPE SEE SHEET A2.2

SCOPE OF WORK: PHASE 2

ALL PHASE 2 CONSTRUCTION IS OUTSIDE OF NEW CRITICAL AREA ORDINANCE BUFFER AND SETBACK CURRENTLY REQUIRED BY CODE. PHASE 1 CONSTRUCTION

ALL OF PHASE TWO CONSTRUCTION OCCURS OUTSIDE OF ALL CRITICAL AREA BUFFER AND SETBACK CURRENTLY REQUIRED BY CODE.

PHASE TWO PROPOSED WORK

- 4. COMPLETE STORM DRAINAGE AND RELATED BIO PLANTERS

IBC 2018

CONSTRUCTION:

VB - FULLY SPRINKLERED (TYPE R FIRE SPRINKLER SYSTEM WILL

- PROVIDE IMPERVIOUS SURFACE, LOT COVERAGE,

FIRE PROTECTION

13 R RESIDENTIAL SPRINKLER **STANDARD**

These design standards have been adopted by the Mercer Island Fire Department and have been established for the design and installation of sprinkler systems for one- and two-family dwellings, zero lot line townhomes and manufactured homes.

The 2010 edition of NFPA 13, NFPA 13D, and NFPA 13R shall be used unless specifically noted otherwise. The current Mercer Island-adopted building and fire codes shall be used. See Mercer Island Municipal Code Title 17.

NFPA 13R PLUS ~ FIRE SPRINKLER SYSTEM REQUIREMENTS

All requirements of NFPA 13R and the following additions and modifications are required.

Water supply

A 1 1/2" minimum water meter and 2" minimum service line is required for all 13R Plus sprinkler Systems. This is the minimum requirement and the sprinkler calculations for the project shall determine the actual meter and service line size. The Plumbing Code may still require a larger size. A water meter permit will not be issued until the sprinkler permit is approved. To reduce delays, sprinkler plans shall be completed as early in the process as possible.

- Back Flow Preventer
- A 1 ½" minimum Backflow preventer and Riser is required.
- Fire Department Connection (FDC)
- A 1 ½" hose connection is required in a visible location beside the garage door. The check valve shall remain accessible for service. The FDC pipe run shall be a minimum of $1\,\%$ and shall maintain that size all the way to the riser.
- Water Flow Alarm
- The sprinkler system shall have installed a means of notification for a water flow event.

INTERIOR: You may connect the water flow switch to the sounder side of the line voltage smoke alarms. Firex smoke detectors use part # 0498 and Kidde with relay/power supply

EXTERIOR: An exterior grade 8" Potter bell or equivalent shall be installed. This shall be

Garage Coverage

Full coverage of attached garages is required. It is expected that all heads will operate in the event of a car fire within the garage and the system shall be designed to provide adequate flow. Any garages with more than 4 heads in them need to be piped in a manner that a larger flow is available than would be normally designed. An 1 ½" feed shall be

- Spare Head Box

A cabinet containing a minimum of two spare heads of each type and a sprinkler wrench shall be provided.

• Storage Room

Any crawlspace that has a concrete floor and a full size door shall be presumed to be a

- All bathrooms regardless of size shall be covered.
- Closet Coverage
- All closets in common areas or egress pathways shall be covered.

future storage room and sprinkler coverage shall be provided.

Water flow monitoring by a Central Station is required.

module SM120X are currently approved for this purpose.

If you cannot interface the water flow switch to smoke alarms then a separate horn or bell is required to be located on each level including the basement or lowest level of the structure for occupant water-flow notification to a minimum of 75 dBA in the sleeping

provided from the riser to any heads greater than 4 within the garage.

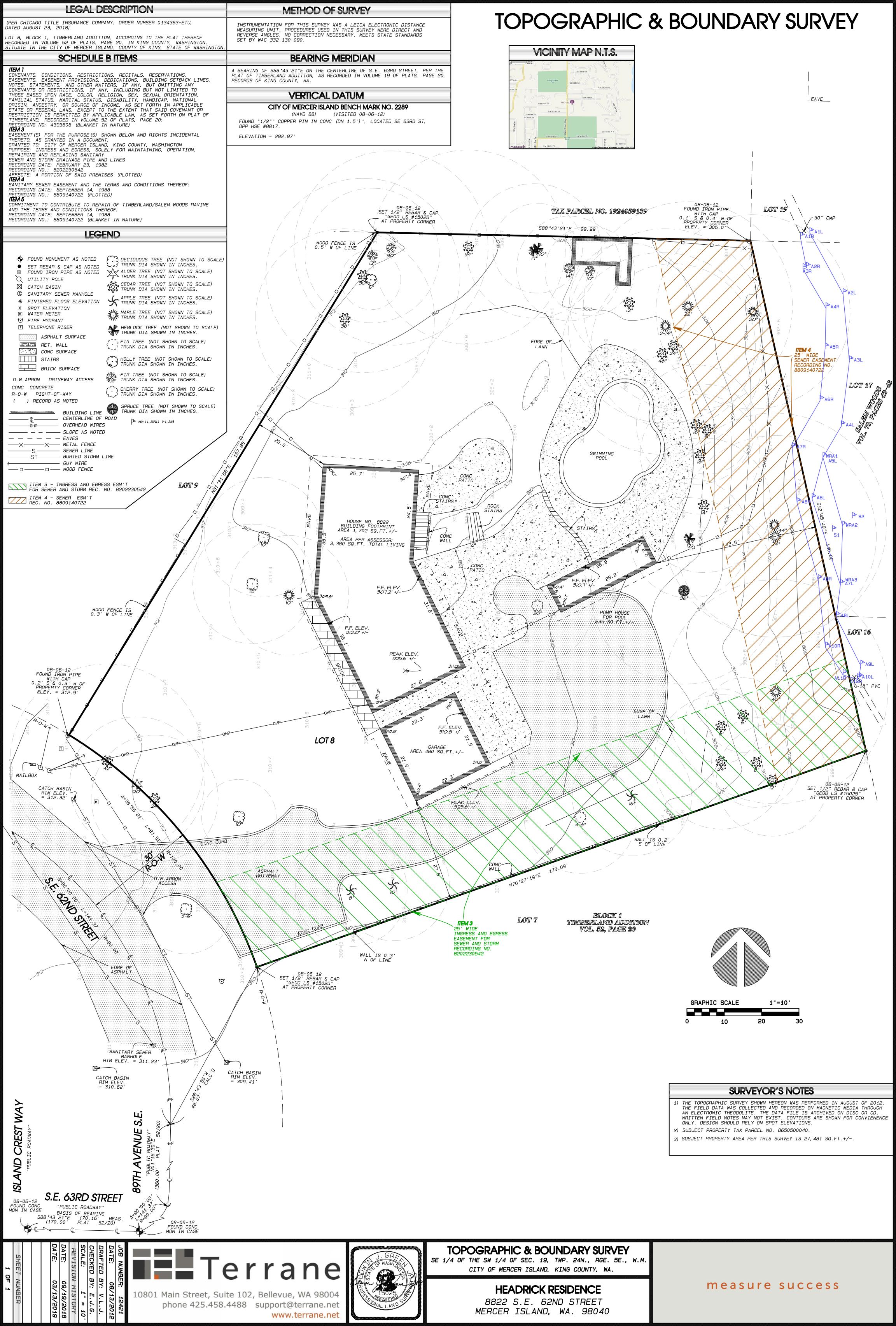
• Sprinkler System Drain

The system drain shall be piped all the way to the exterior of the building and not cause damage to landscaping while water is flowing. Hose connections are not allowed.

- Water Flow Monitoring

Decks, balconies and patio Coverage

Where a roof or deck is provided above, sprinklers shall be installed to protect attached exterior balconies, attached exterior decks, and ground floor patios serving a dwelling



b. SOME MAJOR SUBCONTRACT ITEMS MAY BE INCLUDED AS AN ALLOWANCE ITEM AND NOT BE BID AT THIS TIME. G/C WILL INCLUDE STATED ITEMS IN THE CONTRACT AND COORDINATE AS PART OF THE CONTRACT. EXAMPLES ARE ELECTRICAL ROUGH IN AND FINISH, HVAC, SOLAR PANEL INSTALLATION.

c. DRAWINGS AND SPECIFICATIONS AS FOLLOWS:

1. ARCHITECTURAL DRAWINGS (THIS SET)

2. PROJECT DOCUMENTS AND SPECIFICATION BINDER / DIANE ROSELLINI ASSOCIATES

3. STRUCTURAL DRAWINGS: QUANTUM CONSULTING

4. CIVIL DRAWINGS: BUSH, ROED, HITCHINGS CONSULTING

5. LANDSCAPE DRAWINGS: TO BE DETERMINED 6. INTERIOR DESIGN PACKET: SUPPLIED SEPARATELY

OWNER SUPPLIED ITEMS:

a. KITCHEN APPLIANCES - GC TO INSTALL COMPLETE

b. WASHER AND DRYER - GC TO INSTALL COMPLETE

a. OWNER PAYS FOR BUILDING PERMIT, SURVEY LOCATE, SPECIAL FEES, SPECIAL INSPECTIONS AS REQUIRED.

b. GC WILL INCLUDE IN HIS COSTS ALL PERMIT FEES NORMALLY OBTAINED BY THE SUBCONTRACOR FOR HIS PORTION OF THE WORK.

CONSTRUCTION IRREGULARITIES

a. ALLOW FOR REASONABLE IRREGULARITIES IN THE CONSTRUCTION. REPORT TO ARCHITECT / OWNER AS SOON AS POSSIBLE ANY CONDITIONS THAT MAY ALTER THE FINISHED PRODUCT SO THAT SOLUTIONS MAY BE IMPLEMENTED. CHANGES TO PLANNED WORK AND DETAILS ARE TO BE DISCUSSED WITH THE ARCHITECT / OWNER PRIOR TO EXECUTION, AND WITH REASONABLE NOTICE.

SPECIAL CONDITIONS

PERMITS AND FEES

a. THE ARCHITECT MAY FURNISH ADDITIONAL INSTRUCTIONS / DRAWINGS NECESSARY FOR THE PROPER EXECUTION OF THE WORK. INSTRUCTIONS WILL BECOME PART OF THE CONTRACT DOCUMENTS.

b. LINES AND LEVELS: BEFORE STARTING WORK LAYOUT ALL REFERENCE POINTS, AND PROTECT SAME. EMPLOY ORIGINAL SURVEYOR OF RECORD TO LAY OUT WORK.

BUILDING CODE

a. CONFORM TO REQUIREMENTS OF THE IBC 2018 AND IRC 2018, CURRENT APPLICABLE ELECTRICAL AND MECHANICAL CODE, AND WASHINGTON STATE

b. CONFORM TO ANY SPECIAL REQUIREMENTS OF CITY OF MERCER ISLAND

INSPECTION REQUIREMENTS

a. SPECIAL INSPECTOR: PAID FOR BY OWNER, IF REQUIRED.

b. BUILDING INSPECTIONS: MAKE ALL ARRANGEMENTS FOR COUNTY INSPECTIONS

c. REPORTS: PROVIDE COPY OF ALL SPECIAL INSPCTION REPORTS TO OWNER / ARCHITECT

TEMPORARY FACILITIES REQUIRED

a. JOB SHACK: AT GC DISCRETION / PROVIDE RAIN COVERED DRAWING LAYOUT TABLE, MINIMUM

b. CONSTRUCTION UTILITIES: OWNER TO PRIVDE AND PAY FOR POWER AND WATER DURING CONSTRUCTION. GC TO MAKE ALL CONNECTIONS,

EXTENSIONS, AS REQUIRED FOR CONSTRUCTION. GC TO PROVIDE TEMPORARY FACILITIES TO PROTECT WORK DURING CONSTRUCTION.

c. GC TO PROVIDE TEMPORARY TOILET AT JOBSITE.

d. GC TO PROVIDE TEMPORARY ENCLOSURES DURING CONSTRUCTION TO PROTECT WORK IN PLACE, AND DAMAGE TO NEIGHBORING PROPERTIES.

e. ACCESS: MAINTAIN ACCESS IN GOOD CONDITION DURING CONSTRUCTION AT ALL TIMES. CLEAN UP DEBRIIS PROMPTLY. MAINTAIN CLEAN PROPERTY

ACCESS AT ALL TIMES. CONFORM TO CITY OF MERCER ISLAND CONSTRUCTION PROTOCOLS. f. MATERIAL STORAGE: BUILDING MATERIAL MAY BE STORED ON SITE AT THE DIRECTION AND RISK OF THE GC.

a. EACH SUBCONTRACTOR AT THE COMPLETION OF HIS WORK, SHALL LEAVE THE JOB SITE BROOM CLEAN.

b. ALL GARBAGE / TRASH SHALL BE NEATLY STORED AND REGULARLY COLLECTED.

a. PROTECT AND MAINTAIN AT THE SITE FIRST AID KITS, FIRE EXTINGUISHERS, AND OTHER EQUIPMENT NECESSARY TO CONTROL MINOR EMERGENCY SITUATIONS

b. RAILINGS: PROVIDE SAFETY RAILINGS ON ALL OPEN FRAMING AS REQUIRE BY SAFETY LAWS AND COMMON SINSE.

FINAL CLEAN UP

a. LEAVE RESIDENCE IN READY TO MOVE IN CONDITION. ALL WINDOWS PROFESSIONALLY CLEANED.

PROJECT CLOSE OUT

a. ALL WORK PERFORMED ON THIS PROJECT AS A PART OF THIS CONTRACT SHALL BE GUARANTEED AGAINST DEFECT IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FORM THE DATE OF FINAL ACCEPTANCE. GC AGREES TO REMEDY WITHOUT DELAY OR EXPENSE TO OWNER, ANY DEFECTS,

PROVIDED THAT IN THE JUDGEMENT OF THE ARCHITECT THEY ARE NOT A RESULT OF MISUSE OR ABUSE b. MANUALS: GC TO FURNISH PACKET OF ALL MANUALS WARRENTIES, ETC FOR GC FURNISHED ITEMS

c. PROVIDE FINAL CERTIFICATE OF OCCUPANCY FROM THE GOVERNING JURISDICTION THAT THE BUILDING HAS BEEN APPROVED AND ACCEPTED.

DIVISION 2 SITEWORK

DEMOLITION

a. PROTECT ADJACENT PROPERTIES; CONFORM TO ALL APPLICABLE SAFETY REGULATIONS

b. UTILITIES; VERIFY LOCATIONS OF ALL EXISTING UTILITIES, CAP OR MOVE AS REQUIRED PER CODE.

c. PERFORM REQUIRED HAZARDOUS MATERIAL TESTING PRIOR TO DEMOLITION, AND REMOVE AS LAW REQUIRES. d. DEMOLISH RESIDENCE COMPLETELY AND REMOVE FROM SITE. CONFORM TO CITY DEMOLITION REQUIREMENTS AND PROTOCOL

EARTHWORK a. PROTECT ADJACENT PROPERTY

b. PROVIDE REQUIRED SILT FENCE PROTECTION AS REQUIRED BY CITY AND CIVIL DRAWINGS.

c. EXCAVATE AS NECESSARY FOR THE WORK. EXTEND FOOTINGS TO FIRM UNDISTURBED EARTH.

d. PROVIDE 6" FREE DRAINING GRAVEL UNDER NEW SLAB. e. EXCESS EXCAVATED MATERIALS TO BE REMOVED FROM SITE.

f. PROVIDE PIN PILE SUPPORTS UNDER NEW FOUNDATIONS IF DEEMED NECESSARY BY GEOTECHNICAL ENGINEER

SITE DRAINAGE

a. CONFORM TO CIVIL ENGINEERING PLANS. FOLLOW STANDARDS AND CODES AS SET FORTH BY THE GOVERNING AGENCY. WATER SUPPLY

a. PROVIDE NEW WATERLINE FROM WATER METER / CONNECTION POINT TO BUILDING

b. VERIFY SIZE OF EXISTING WATER METER

c. WATER METER TO CONFORM TO FIRE SPRINKLER REQUIREMENTS FOR NEW STRUCTURE.

IRRIGATION

a. GC TO PROVIDE SLEEVES UNDER PAVERS OR CONCRETE FOR FUTURE IRRIGATION.

LANDSCAPING / PAVING and DECKING SYSTEMS a. LANDSCAPING TO BE DETERMINED

b. ENTRY PATIO: MORTAR SET STONE PAVER ON CONC SLAB / STONE TO BE DETERMINED

c. DRIVEWAY: PROVIDE NEW ASPHALT PAVING AS REQUIRED. d. OUTDOOR KITCHEN PATIO: PROVIDE MORTAR SET STONE PAVER ON CONCRETE SLAB / STONE TO

e. POOL DECKING: HARDWOOD SPACED DECKING WITH CONCEALED FASTENER SYSTEM. IPE OR

SIMILAR. PROVIDE SAMPLES FOR OWNER APPROVAL.

DIVISON 3 - CONCRETE

FOUNDATIONS

a. CONFORM TO STRUCTURAL DRAWINGS AND STRUCTURAL NOTES.

b. SLEEVE AS REQUIRED FOR UTILITIES

CONCRETE FLATWORK

a. GARAGE SLAB; 4" SLAB, #4 BAR AT 24" O/C, VAPOR BARRIER, 2" RIGID INSULATION POLY ISO RIGID INSULATION AT PERIMETER, GRAVEL SUBGRADE.

b. VAPOR BARRIER: STEGO 15 MIL STEGO OR EQUAL WITH TAPED SEAMS.

c. INSTALLATION; INSTALL RE-BAR AT MIDPOINT OF SLAB. USE CHAIR BLOCKS

d. CONCRETE FINISH - GARAGE SLAB; MIX DESIGN TO ACHIEVE 3000 PSI. HARD TROWEL / EPOXY.

DIVISION 4 - MASONRY

a. FURNISH AND INSTALL ALL MASONRY WORK AS DRAWN, OR AS NOTED HEREIN, TO INCLUDE EXTERIOR MASONRY BRICK VENEER AS INDICATED ON ELEVATIONS.

MASONRY AS MANUFACTURED BY MUTUAL MATERIALS

b. STANDARD BRICK, RUNNING BOND, PROVIDE SAMPLES FOR OWNER APPROVAL.

c. JOINTS - CONCAVE TOOLED JOINT

DIVISION 5 - METALS

a. PROVIDE STRUCTURAL STEEL / CONNECTORS PER STRUCTURAL DRAWINGS

b. PROVIDE CUSTOM STEEL EXTERIOR RAILINGS PER DRAWINGS; FINISH / DESIGN TO BE DETERMINED

c. PROVIDE CUSTOM INTERIOR STEEL RAILINGS; FINISH / DESIGN TO BE DETERMINED

DIVISON 6 - WOOD AND PLASTICS

a. PROVIDE LABOR AND MATERIAL PER DRAWINGS AND STRUCTURAL NOTES.

b. PLYWOOD: AS NOTED; **DO NOT USE ANY OSB ON THE PROJECT.**

c. HARDWARE: SIMPSON OR APPROVED. d. VAPOR BARRIER SYSTEM - VAPROSHIELD AS FOLLOWS:

WRAPSHIELD SA MEMBRANE

7 mm VAPROMAT DRAINAGE MAT VAPROFLASHING SA AT OPENINGS

FOLLOW MANUFACTURER RECOMMENDATIONS FOR COMPLETE SYSTEM

e. PROVIDE SAFETY RAILINGS AT ALL OPENINGS

FINISH CARPENTRY EXTERIOR

a. EXTERIOR EXPOSED RAFTERS AT UPPER ROOF DECK, SAWN DOUG FIR. b. IPE OR OTHER HARDWOOD POOL DECKING FOR COMPLETE INSTALLATION.

FINISH CARPENTRY INTERIOR

a. WINDOW LINER - PAINTED WOOD LINER and CASING

b. 5.5" X ¾" BASEBOARD, PAINTED WOOD

c. DOOR JAMB AND CASING, MAIN LEVEL - PAINTED WOOD

d. DOOR JAMB AND CASING, UPPER LEVEL - PAINTED WOOD

CABINET WORK / COUNTERS

1. CUSTOM PAINTED CABINETS: INSET RAISED PANEL TYPICAL. SEE DIANE ROSELLINI DESIGN PACKET

2. COUNTER TOPS TO BE DETERMINED; SEE INTERIOR SPECIFICATION / DIANE ROSELLINI

3. TYPICAL COUNTER HEIGHT = VERIFY WITH OWNER.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

BUILDING INSULATION a. UNDER SLAB - 2" RIGID FOAM PER ENERGY CODE. (POLYISO)

HARDI TRIM SHAPES. PROVIDE DETAILS FOR APPROVAL.

b. EXTERIOR WALLS - R-25 FIBERGLASS BATT

c. EXTERIOR CONCRETE: FURRED WALLS WITH RIGID INSULATION R 19

d. CEILING - 2" RIGID SPRAY FOAM AT BOTTOM OF SHEATHING; ADD BATT INSULATION TO ACHIEVE R-380VERALL

e. BEDROOM / BATHROOM WALLS - DENSE ACCOUSTIC BATT, FILL CAVITY.

f. PROVIDE INSULATION PER WASHINGTON STATE ENERGY CODE FOR HEADERS, ETC.

EXTERIOR SIDING

 ALL EXTERIOR SIDING: PROVIDE JAMES HARDI PRIMED BEVEL SIDING WITH 7" EXPOSURE. INSTALL PER MANUFACTURER RECOMMENDATIONS. ALL WINDOWS AND DOORS CASED WITH

ROOFING

1. PROVIDE STANDING SEAM MECHANICALLY FASTENED METAL ROOF AS INDICATED ON ROOF PLAN, WITH ASSOCIATED FLASHING DETAILS FOR COMPLETE INSTALLATION.

2. ROOF OVER HIGH BAY GARAGE: 60 MIL TPO, COVER BOARD, RIGID INSULATION PER DRAWINGS.

SHEET METAL / FACTORY FINISH METAL

1. GUTTERS - 6" FASCIA GUTTER

2. DOWNSPOUTS- MATCHING.

CAULKING AND SEALANTS 1. BEST GRADE FOR CONDITION OF USE.

DIVISION 8 - DOORS AND WINDOWS

WOOD DOORS: ENTRY 1. CUSTOM FABRICATED FROM APPROVED DOOR SHOP.

2. ENTRY DOOR ALLOWANCE

\$10,000. 3. INTERIOR DOORS - SEE DOOR SCHEDULE / ELEVATIONS AND ROSELLINI DESIGN PACKET.

WINDOWS MISCELLANEOUS GLASS

a. TYPICAL WINDOW / DOOR: MARVIN CLAD, "ULTIMATE", WITH BLACK FINISH IN/OUT

b. MIRRORS: ¼" CLEAR POLISHED PLATE, TYPICAL

c. FOLDING DOOR IN GREAT ROOM: MARVIN CLAD d. FOLDING KITCHEN WINDOW: MARVIN CLAD

GARAGE DOORS

a. CUSTOM WOOD, PANEL STYLE; DESIGN TO BE DETERMINED b. HIGH BAY GARAGE DOOR: COIL ROLL UP, INSULATED, ELECTRIC OPERATOR

HARDWARE INTERIOR DOORS

1. BUTTS, 3 PER DOOR, FINISH TO BE DETERMINED

2. PROVIDE HARDWARE ALLOWANCE; MANUFACTURER AND STYLE TO BE DETERMINED

EXTERIOR DOORS

1. BUTTS - 4 per door - FINISH TO BE DETERMINED 2. BUTTS - ENTRY DOOR, 4 PER DOOR - FINISH TO BE DETERMINED **DIVISON 9 - FINISHES**

GYPSUM WALLBOARD

a. ALL GYPSUM WALLBOARD TO BE 5/8" THICK, TYPICAL

b. GWB IN GARAGE - LEVEL 4 FINISH

c. GWB EXPOSED IN FINISHED ROOMS: LEVEL 5 FINISH

CERAMIC / DECORATIVE SPECIALTY TILE / DIMENSIONAL STONE

a. MUD SET SHOWER PAN IN ALL BATHROOMS, OR APPROVED ALTERNATE. b. CEMENT BOARD BASE UNDER ALL TILE FLOORS

c. CEMENT BOARD BACKER AND WATERPROOF MEMBRANE ON SHOWER WALLS

d. TILE MATERIAL TO BE DETERMINED

a. TO BE DETERMINED / SEE ROSELLINI DESIGN PACKET

PAINTING AND FINISHING

FLOORING MATERIALS

a. OWNER AND INTERIOR DESIGNER WILL SELECT COLORS

b. PROVIDE 2 CLEARLY LABELED FULL QUARTS OF ALL COLORS USED AT END OF PROJECT

c. PAINT MANUFACTURER - SHERWIN WILLIAMS OR BENJAMIN MOORE, BEST QUALITY FOR CONDITION OF USE. d. PAINT ON GWB - 1 CT PRIMER / 2 COATS LATEX

e. PAINT ON INTERIOR WOOD TRIM - 1 CT PRIMER / 2 CTS LATEX ENAMEL

f. EXTERIOR PAINT ON HARDI SIDING: FACTORY PRIMER, SPOT PAINT DEFECTS, 2 COATS BEST GRADE LATEX HOUSE

DIVISON 10 - SPECIALTIES

MISCELLANEOUS ITEMS.

1. COORDINATE AND INSTALL BACKING FOR ALL ITEMS, EITHER CONTRACTOR OR OWNER INSTALLED. - INCLUDES BUT NOT LIMITED TO TOWEL BARS, TP HOLDERS, SHOWER RODS, ETC.

ITEMS FURNISHED BY OWNER, INSTALLED BY CONTRACTOR

APPLIANCES

2. CENTRAL VACUUM UNIT; IF DESIRED. 3. 2 WASHERS / 2 DRYERS

ITEMS FURNISHED BY GC PER OWNER DIRECTION 1. EPOXY FLOORING AT GARAGE FLOORS

2. ANY GARAGE SHELVING (CONTRACTOR PROVIDES BACKING)

3. CLOSET SHELVING INCLUDING MASTER 4. AUDIO/VIDEO SYSTEM

5. SECURITY SYSTEM AND CCTV CAMERAS

6. WINDOW COVERINGS

DIVISION 15 - MECHANICAL 1. HIGH EFFICIENCY HVAC SYSTEM. TWO SYSTEMS

4. PROVIDE GENERATOR, 20 KW OR APPROVED.

2. WHOLE HOUSE VENTILATION - PER CODE; PROVIDE OUTLINE SPECIFICATION

3. BATHROOM AND UTILITY FANS. FAN TECH IN LINE TYPE. MINIMUM 150 CFM 4. HOT/COLD MIXING VALVE AT GARAGE

5. DIRECT VENT FIREPLACE; GREAT RM- TOWN & COUNTRY TC 36

DIVISION 16 - ELECTRICAL 1. FURNISH AND INSTALL ELECTRICAL PER CODE, AND DRAWINGS.

5. PREPARE ELECTRICAL PANEL FOR SOLAR SYSTEM ON SECOND FLOOR ROOF

3. LIGHTING CONTROLS: PROVIDE DESIGNED SYSTEM FOR OWNER REVIEW

2. LIGHTING /SWITCHING DESIGN: PROVIDE SHOP DRAWINGS FOR OWNER REVIEW

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REVISIONS:

DATE: 04-28-22

OUTLINE SPECIFIC

REVISED: 04-28-2022

2018 Washington State Energy Code – Residential Prescriptive Energy Code Compliance for All Climate Zones in Washington Single Family – New & Additions (effective February 1, 2021)

These requirements apply to all IRC building types, including detached one- and two-family

dwellings and multiple single-family dwellings (townhouses).		
Project Information	Contact Information	
Headrick Residence		
8822 SE 62nd St - Mercer Island, WA		

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. Based on the size of the structure, the appropriate number of additional credits are checked as chosen by the permit applicant.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

Authorized Representative All Climate Zones (Table R402.1.1) R-Value a U-Factor Fenestration U-Factor b 0.30 Skylight U-Factor ^b 0.50 Glazed Fenestration SHGC b,e 0.026 Wood Frame Wall g,h 0.056 0.029 Below Grade Wall c,h 10/15/21 int + TB 0.042

- R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity that is less a than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.
- b The fenestration *U*-factor column excludes skylights.
- "10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at c the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB"
- means R-5 thermal break between floor slab and basement wall. d R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.
- For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth
- e extends over the top plate of the exterior wall. R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter f slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall
- meet the requirements for thermal barriers protecting foam plastics.
- For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.
- Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard h framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10
- insulation.

Slab d,f R-Value & Depth

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Each dwelling unit *in a residential building* shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control sequence of operation.

- 1. Small Dwelling Unit: 3 credits
- Dwelling units less than 1,500 sf in conditioned floor area with less than 300 sf of fenestration area. Additions to existing building that are greater than 500 sf of heated floor area but less than 1,500 sf.
- 2. Medium Dwelling Unit: 6 credits
- All dwelling units that are not included in #1 or #3

 3. Large Dwelling Unit: 7 credits

 Dwelling units exceeding 5,000 sf of conditioned floor area
- 4. Additions less than 500 square feet: 1.5 credits

All other additions shall meet 1-3 above

	Summary of 1	able R406.2		
Heating Options	Fuel Normalization Descriptions		elect ONE option	User Notes
1	Combustion heating minimum NAECA ^b	0.0		
2	Heat pump ^c	1.0	•	
3	Electric resistance heat only - furnace or zonal	-1.0		
4	DHP with zonal electric resistance per option 3.4	0.5		
5	All other heating systems	-1.0		
Energy Options	Energy Credit Option Descriptions		elect ONE on from each gory ^d	
1.1	Efficient Building Envelope	0.5		
1.2	Efficient Building Envelope	1.0		
1.3	Efficient Building Envelope	0.5		
1.4	Efficient Building Envelope	1.0		
1.5	Efficient Building Envelope	2.0		
1.6	Efficient Building Envelope	3.0		
1.7	Efficient Building Envelope	0.5		
2.1	Air Leakage Control and Efficient Ventilation	0.5		
2.2	Air Leakage Control and Efficient Ventilation	1.0		
2.3	Air Leakage Control and Efficient Ventilation	1.5		
2.4	Air Leakage Control and Efficient Ventilation	2.0		
3.1 ^a	High Efficiency HVAC	1.0		
3.2	High Efficiency HVAC	1.0	•	Heat pump HSPF 9.5
3.3 ^a	High Efficiency HVAC	1.5		
3.4	High Efficiency HVAC	1.5		
3.5	High Efficiency HVAC	1.5		
3.6ª	High Efficiency HVAC	2.0		
4.1	High Efficiency HVAC Distribution System	0.5		
4.2	High Efficiency HVAC Distribution System	1.0		

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	Summary of Table	R406.2 (co	nt.)	
ergy tions	Energy Credit Option Descriptions (cont.)	Credits - select ONE energy option from each category ^d		User Notes
.1 ^d	Efficient Water Heating	0.5		
5.2	Efficient Water Heating	0.5		
5.3	Efficient Water Heating	1.0		
5.4	Efficient Water Heating	1.5		
5.5	Efficient Water Heating	2.0	•	Tier 3 heat pump water heater
5.6	Efficient Water Heating	2.5		
.1 ^e	Renewable Electric Energy (3 credits max)	1.0	3	3600 kWh Annual Solar
7.1	Appliance Package	0.5		
	Total Credits		7.0	CLEAR FORM

- a. An alternative heating source sized at a maximum of 0.5 W/sf (equivalent) of heated floor area or 500 W,
- whichever is bigger, may be installed in the dwelling unit. b. Equipment listed in Table C403.3.2(4) or C403.3.2(5)
- c. Equipment listed in Table C403.3.2(1) or C403.3.2(2)

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- d. You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.
- e. 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max. See the complete Table R406.2 for all requirements and option descriptions.

Please print only pages 1 through 3 of this worksheet for submission to your building official.

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	Table 406.3 – Energy Credits (Single Family)	
Option	Description	Credits: SF
Only one o	NT BUILDING ENVELOPE OPTIONS option from Items 1.1 through 1.7 may be selected in this category. ce with the conductive UA targets is demonstrated using Section R402.1.4, Total UA alternativ UA/Target UA)] > the required %UA reduction.	e, where [1-
1.1	Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.24	0.5
1.2	Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.20	1.0
1.3	Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.28 Floor R-38 Slab on grade R-10 perimeter and under entire slab below grade slab R-10 perimeter and under entire slab or Compliance based on Section R402.1.4: Reduce the Total conductive UA by 5%	0.5
1.4	Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.25 Wall R-21 plus R-4 ci Floor R-38 Basement wall R-21 int plus R-5 ci Slab on grade R-10 perimeter and under entire slab Below grade slab R-10 perimeter and under entire slab or Compliance based on Section R402.1.4: Reduce the Total conductive UA by 15%	1.0
1.5	Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.22 Ceiling and single-rafter or joist-vaulted R-49 advanced Wood frame wall R-21 int plus R-12 ci Floor R-38 Basement wall R-21 int plus R-12 ci Slab on grade R-10 perimeter and under entire slab Below grade slab R-10 perimeter and under entire slab or Compliance based on Section R402.1.4: Reduce the Total conductive UA by 30%	2.0
1.6	Prescriptive compliance is based on Table R402.1.1 with the following modifications: Vertical fenestration U = 0.18 Ceiling and single-rafter or joist-vaulted R-60 advanced Wood frame wall R-21 int plus R-16 ci Floor R-48 Basement wall R-21 int plus R-16 ci Slab on grade R-20 perimeter and under entire slab Below grade slab R-20 perimeter and under entire slab or Compliance based on Section R402.1.4: Reduce the Total conductive UA by 40%.	3.0
1.7	Advanced framing and raised heel trusses or rafters Vertical Glazing U-0.28 R-49 Advanced (U-0.020) as listed in Section A102.2.1, Ceilings below a vented attic and R-49 vaulted ceilings with full height of uncompressed insulation extending over the wall top plate at the eaves.	0.5

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	Prescriptive Energy Code Compliance for All Climate Zones in Washington Single Family – New & Additions (effective February 1, 2021)	
	Table 406.3 – Energy Credits (Single Family)	
Option	Description	Credits: SF
	AGE CONTROL AND EFFICIENT VENTILATION OPTIONS	
Only one o	ption from Items 2.1 through 2.4 may be selected in this category.	
	Compliance based on R402.4.1.2: Reduce the tested air leakage to 3.0 air changes per hour maximum at 50 Pascals <i>or</i>	
	For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.3 cfm/sf maximum at 50 Pascals <i>and</i>	
2.1	All whole house ventilation requirements as determined by Section M1507.3 of the International Residential Code or Section 403.8 of the International Mechanical Code shall be met with a high efficiency fan(s) (maximum 0.35 watts/cfm), not interlocked with the furnace fan (if present). Ventilation systems using a furnace including an ECM motor are allowed, provided that they are controlled to operate at low speed in ventilation only mode.	0.5
	To qualify to claim this credit, the building permit drawings shall specify the option being selected and the maximum tested building air leakage, and shall show the qualifying ventilation system and its control sequence of operation.	
	Compliance based on Section R402.4.1.2: Reduce the tested air leakage to 2.0 air changes per hour maximum at 50 Pascals <i>or</i>	
2.2	For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.25 cfm/sf maximum at 50 Pascals <i>and</i> All whole house ventilation requirements as determined by Section M1507.3 of the <i>International Residential Code</i> or Section 403.8 of the <i>International Mechanical Code</i> shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of 0.65 . ¹	1.0
2.3	Compliance based on Section R402.4.1.2: Reduce the tested air leakage to 1.5 air changes per hour maximum at 50 Pascals <i>or</i> For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.25 cfm/sf maximum at 50 Pascals <i>and</i> All whole house ventilation requirements as determined by Section M1507.3 of the <i>International Residential Code</i> or Section 403.8 of the <i>International Mechanical Code</i> shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of 0.75 . ¹	1.5
2.4	Compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.6 air changes per hour maximum at 50 Pascals or For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.15 cfm/sf maximum at 50 Pascals and All whole house ventilation requirements as determined by Section M1507.3 of the <i>International Residential Code</i> or Section 403.8 of the <i>International Mechanical Code</i> shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of 0.80 . Duct installation shall comply with Section R403.3.7 . ¹	2.0

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¹ To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the maximum tested building air leakage and shall show the heat recovery ventilation system.

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Energy Star rated (U.S. North) Gas or propane furnace with minimum AFUE of 95% or Energy Star rated (U.S. North) Gas or propane boiler with minimum AFUE of 90%. ² 3.2 Air-source centrally ducted heat pump with minimum HSPF of 9.5. ³ 1. Closed-loop ground source heat pump; with a minimum COP of 3.3 or Open loop water source heat pump with a maximum pumping hydraulic head of 150 feet and minimum COP of 3.6. ³ Ductless mini-spilt heat pump system, zonal control: In homes where the primary space hating system is zonal electric heating, a ductless mini-spilt heat pump system with a minimum HSPF of 10.0 shall be installed and provide heating to the largest zone of the housing unit. ⁴ 3.5 Auctless spilt system heat pumps with no electric resistance heating in the primary living areas. A ductless heat pump system with a minimum HSPF of 10 shall be sized and installed to provide heat to entire dwelling unit at the design outdoor air temperature. To qualify to claim this credit, the building permit drawings shall specify the option being selected, the heated floor area calculation, the heating equipment type(s), the minimum equipment efficiency, and total installed heat capacity (by equipment type). An alternative heating source sized at a maximum of 0.5 W/sf(equivalent) of heated floor area or 500 W, whicheve bigger, may be installed in the dwelling unit. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. To qualify to claim this credit, the building permit drawings shall specify the option being selected an	
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Energy Star rated (U.S. North) Gas or propane furnace with minimum AFUE of 95% or Energy Star rated (U.S. North) Gas or propane boiler with minimum AFUE of 90%. ² 3.2 ² Air-source centrally ducted heat pump with minimum HSPF of 9.5. ³ 1. Closed-loop ground source heat pump; with a minimum COP of 3.3 or Open loop water source heat pump with a maximum pumping hydraulic head of 150 feet and minimum COP of 3.6. ³ Ductless mini-spilt heat pump system, zonal control: In homes where the primary space hating system is zonal electric heating, a ductless mini-spilt heat pump system with a minimum HSPF of 10.0 shall be installed and provide heating to the largest zone of the housing unit. ⁴ 3.5 ² Air-source, centrally ducted heat pump with minimum HSPF of 11.0. ⁴ Ductless split system heat pumps with no electric resistance heating in the primary living areas. A ductless heat pump system with a minimum HSPF of 10 shall be sized and installed to provide heat to entire dwelling unit at the design outdoor air temperature. To qualify to claim this credit, the building permit drawings shall specify the option being selected, the heated floor area calculation, the heating equipment type(s), the minimum equipment efficiency, and total installed heat capacity (by equipment type). An alternative heating source sized at a maximum of 0.5 W/sf(equivalent) of heated floor area or 500 W, whicheve bigger, may be installed in the dwelling unit. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. To qualify to to daim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. To qualify to to daim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. All supply and return	creaits: Si
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3.32 Open loop water source heat pump with a maximum pumping hydraulic head of 150 feet and minimum COP of 3.6.2 Ductless mini-split heat pump system, zonal control: In homes where the primary space heating system is zonal electric heating, a ductless mini-split heat pump system with a minimum HSPF of 10.0 shall be installed and provide heating to the largest zone of the housing unit. 4 3.52 Air-source, centrally ducted heat pump with minimum HSPF of 11.0.4 Ductless split system heat pumps with no electric resistance heating in the primary living areas. A ductless heat pump system with a minimum HSPF of 10 shall be sized and installed to provide heat to entire dwelling unit at the design outdoor air temperature. To qualify to claim this credit, the building permit drawings shall specify the option being selected, the heated floor area calculation, the heating equipment type(s), the minimum equipment efficiency, and total installed heat capacity (by equipment type). An alternative heating source sized at a maximum of 0.5 W/sf(equivalent) of heated floor area or 500 W, whicheve bigger, may be installed in the dwelling unit. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency. HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM OPTIONS All supply and return ducts located in an unconditioned attic shall be deeply buried in ceiling insulation in accordance with Section R403.3.7. For mechanical equipment located outside the conditioned space, a maximum of 10 linear feet of return duct and 5 linear feet of supply duct connections to the equipment may be outside the deeply buried insulation. All metallic ducts located outside the conditioned space must have both transverse and longitudinal joints sealed with	177.75¢
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4.2	0.5
	0.5
Direct compassion reading equipment with Arola less than 60/6 is not be initial under this	
option.	1.0
To qualify to claim this credit, the building permit drawings shall specify the option being	
selected and shall specify the heating equipment type and shall show the location of the	

2018 Washington State Energy Code-R

heating and cooling equipment and all the ductwork.

Prescriptive Path - Single Family

2018 Washington State Energy Code – Residential Prescriptive Energy Code Compliance for All Climate Zones in Washington

2018 Washington State Energy Code-R

TO STATE OF THE ST	Table 406.3 – Energy Credits (Single Family)				
Option		Credits: S			
	IENT WATER HEATING OPTIONS	e.			
Only one	option from Items 5.2 through 5.6 may be selected in this category. Item 5.1 may be combined with any	option.			
5.1	A drain water heat recovery unit(s) shall be installed, which captures waste water heat from all and only the showers, and has a minimum efficiency of 40% if installed for equal flow or a minimum efficiency of 54% if installed for unequal flow. Such units shall be rated in accordance with CSA B55.1 or IAPMO IGC 346-2017 and be so labeled. To qualify to claim this credit, the building permit drawings shall include a plumbing diagram	0.5			
	that specifies the drain water heat recovery units and the plumbing layout needed to install it. Labels or other documentation shall be provided that demonstrates that the unit complies with the standard.				
5.2	Water heating system shall include one of the following: Energy Star rated gas or propane water heater with a minimum UEF of 0.80. ⁵	0.5			
	Water heating system shall include one of the following: Energy Star rated gas or propane water heater with a minimum UEF of 0.91 <i>or</i>				
5.3	Solar water heating supplementing a minimum standard water heater. Solar water heating will provide a rated minimum savings of 85 therms or 2000 kWh based on the Solar Rating and Certification Corporation (SRCC) Annual Performance of OG-300 Certified Solar Water Heating Systems <i>or</i>				
	Water heater heated by ground source heat pump meeting requirements of Option 3.3.				
	To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the water heater equipment type and the minimum equipment efficiency and, for solar water heating systems, the calculation of minimum energy savings.				
	Water heating system shall include one of the following: Electric heat pump water heater meeting the standards for Tier I of NEEA's advanced water heating specification or				
5.4	For R-2 Occupancy, electric heat pump water heater(s), meeting the standards for Tier I of NEEA's advanced water heating specification, shall supply domestic hot water to all units. If one water heater is serving more than one dwelling unit, all hot water supply and recirculation piping shall be insulated with R-8 minimum pipe insulation. ⁵	1.5			
5.5	Water heating system shall include one of the following: Electric heat pump water heater meeting the standards for Tier III of NEEA's advanced water heating specification or For R-2 Occupancy, electric heat pump water heater(s), meeting the standards for Tier III of NEEA's advanced water heating specification, shall supply domestic hot water to all units. If one water heater is serving more than one dwelling unit, all hot water supply and	2.0			
	recirculation piping shall be insulated with R-8 minimum pipe insulation. ⁵				
5.6	Water heating system shall include one of the following: Electric heat pump water heater with a minimum UEF of 2.9 and utilizing a split system configuration with the air-to-refrigerant heat exchanger located outdoors. Equipment shall meet Section 4, requirements for all units, of the NEEA standard Advanced Water Heating Specification with the UEF noted above or	2.5			
3.0	For R-2 Occupancy, electric heat pump water heater(s), meeting the standards for Tier III of NEEA's advanced water heating specification and utilizing a split system configuration with the air-to-refrigerant heat exchanger located outdoors, shall supply domestic hot water to all units. If one water heater is serving more than one dwelling unit, all hot water supply and recirculation piping shall be insulated with R-8 minimum pipe insulation. ⁵	2.5			

2018 Washington State Energy Code-R

2018 Washington State Energy Code - Residential

	Table 406.3 – Energy Credits (Single Family)	
Option	Description	Credits: SI
6. RENEW	ABLE ELECTRIC ENERGY OPTION	
	For each 1200 kWh of electrical generation per housing unit provided annually by on-site wind or solar equipment a 1.0 credit shall be allowed, up to 3 credits. Generation shall be calculated as follows:	
	For solar electric systems, the design shall be demonstrated to meet this requirement using the National Renewable Energy Laboratory calculator PVWATTs or approved alternate by the code official.	
6.1	Documentation noting solar access shall be included on the plans. For wind generation projects designs shall document annual power generation based on the following factors: the wind turbine power curve; average annual wind speed at the site; frequency distribution of the wind speed at the site and height of the tower.	1.0
	To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall show the photovoltaic or wind turbine equipment type, provide documentation of solar and wind access, and include a calculation of the minimum annual energy power production.	
7. APPLIAI	NCE PACKAGE OPTION	
7.1	All of the following appliances shall be new and installed in the dwelling unit and shall meet the following standards: Dishwasher – Energy Star rated Refrigerator (if provided) – Energy Star rated Washing machine – Energy Star rated Dryer – Energy Star rated, ventless dryer with minimum CEF rating of 5.2	0.5
	To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall show the appliance type and provide documentation of Energy Star compliance. At the time of inspection, all appliances shall be installed and connected to utilities. Dryer ducts and exterior dryer vent caps are not permitted to be installed in the dwelling unit.	

Prescriptive Path - Single Family

2018 Washington State Energy Code-R

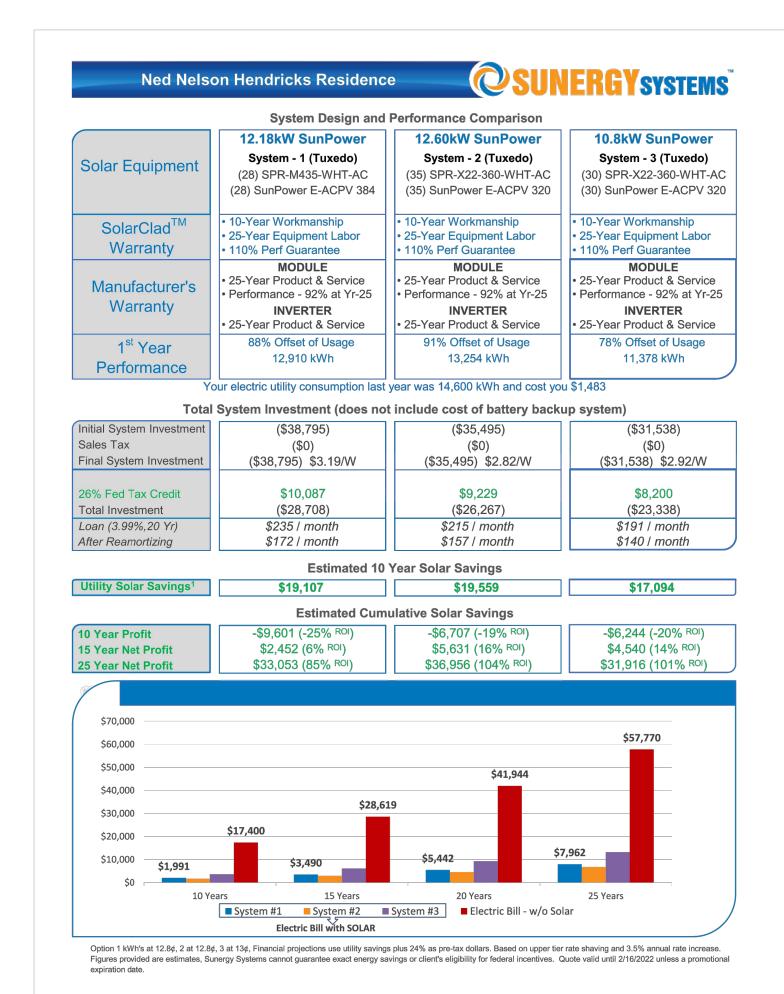
REVISED: 04-28-2022

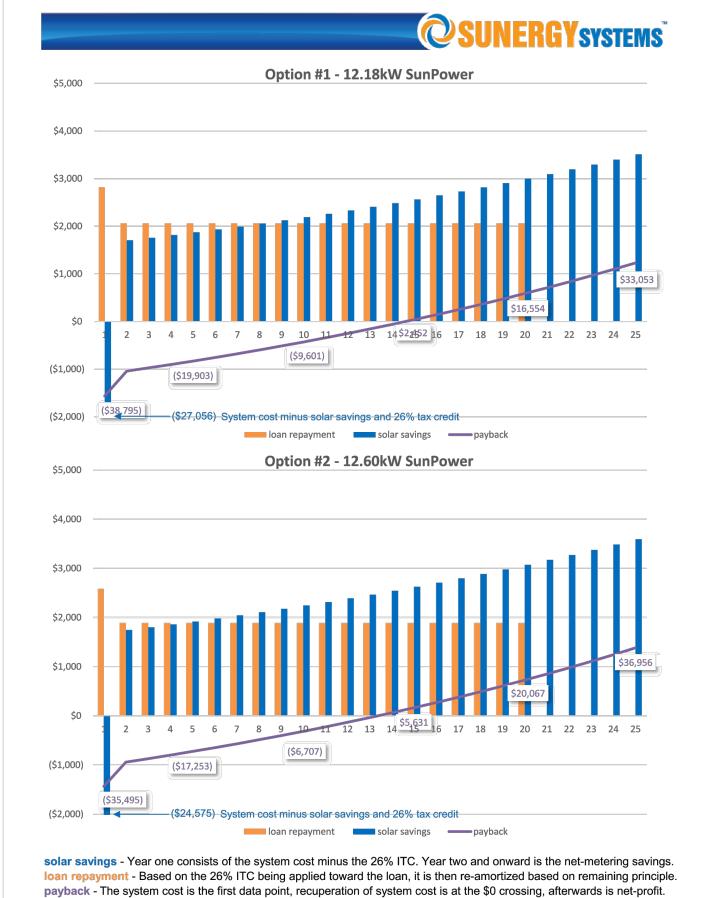
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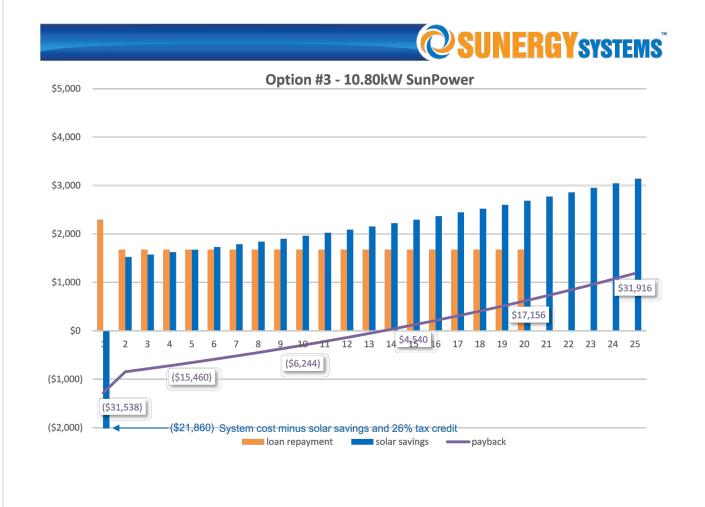
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REVIS	SIONS:	
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DATE: 04-28-22







solar savings - Year one consists of the system cost minus the 26% ITC. Year two and onward is the net-metering savings.

loan repayment - Based on the 26% ITC being applied toward the loan, it is then re-amortized based on remaining principle.

payback - The system cost is the first data point, recuperation of system cost is at the \$0 crossing, afterwards is net-profit.

	Module Specificati	ons and Syst	tem Maxim	um Output	
System Namepl	ate DC Rating of (35) - 360 Watts	(STC) 1)			12.60 kV
System Real Wo	orld DC Power (PTC) 2)				11.74 kW
System DC Outp	out After Soiling & Tolerance Losses				11.54 kW
System Max AC	Output After Inverter & Wiring Losses				11.03 kW
System Max AC	Output Hot Summer Day				9.92 kW
Equipment	Manufacturer & Model	Quantity	Power	Efficiency	Dimension
PV Modules - Su	unPower SPR-X22-360-WHT-AC	35	360 W	22.1%	61.4in x 41.2
Inverter(s) - Sı	unPower E-ACPV 320	35	320 W	97.5%	627 sq.ft.
% of Optin Solar	ite Access & Production Data nal Orientation (TSOF): 95.0% Access after Shading: x 85.0% cource Factor (TSRF ⁴): 80.8%	qualify for syster	ystem has a Ts Sunergy Syste n's ten year kV	SRF of 80.8% a ms Performance	nd allows you e Guarantee. from date of
% of Optin Solar Total Solar Res Avel System Solar I	nal Orientation (TSOF): 95.0%	your syster installation energy out reimburse average co	ystem has a TS Sunergy Syste m's ten year kV , produces less put of 130,767 the customer 1 est of electricity	SRF of 80.8% a ms Performance Wh production, f is than 95% of the kWh, Sunergy 110% of the lost over that ten-year	nd allows you e Guarantee. from date of ne projected Systems shall savings of the ear period.
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⁵⁾ Performances based on the system AC output, site TSRF (orientation, tilt & shading) and 4.08 solar hrs/day.

Customer agrees to the Array Information and understands the Performance Guarantee

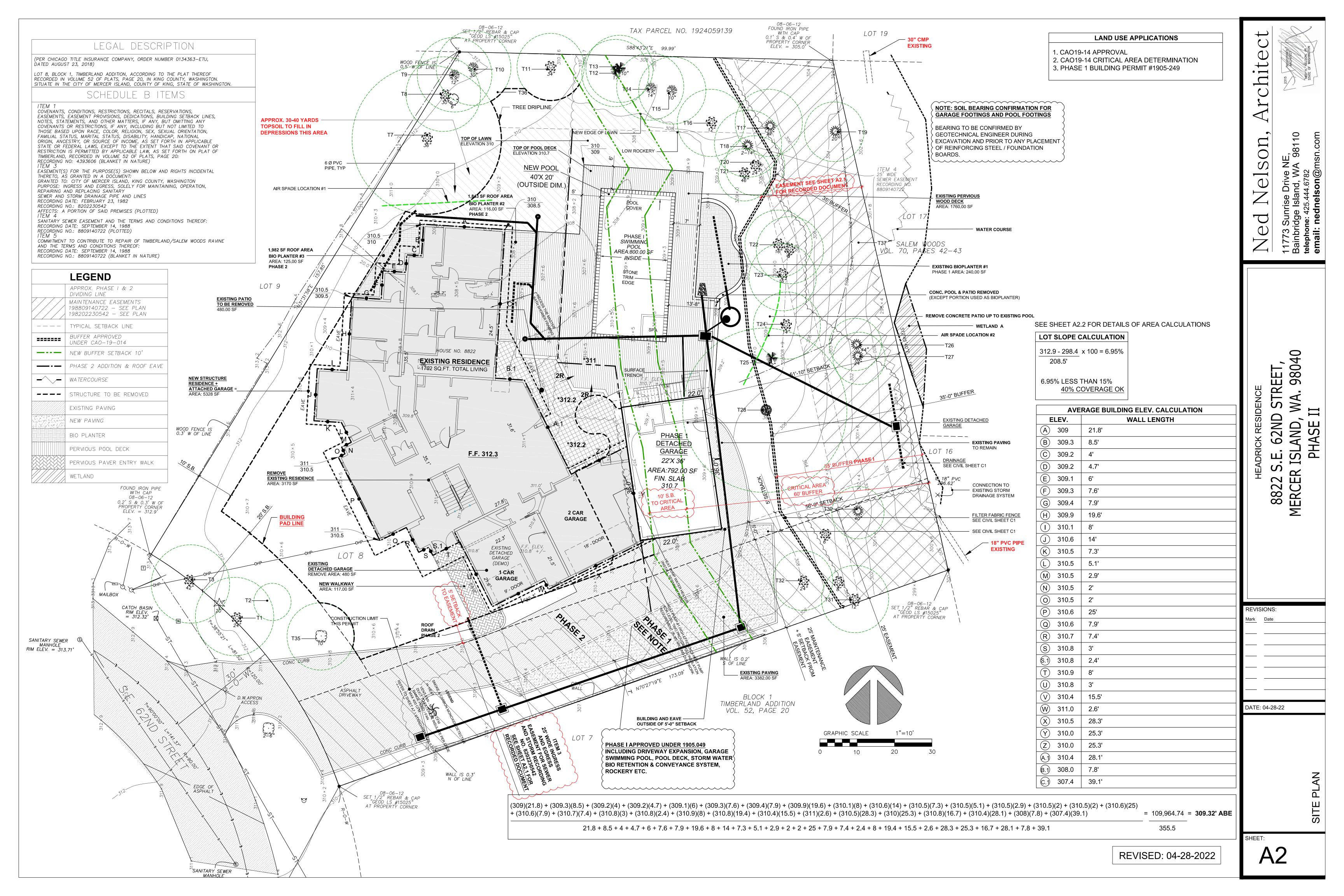
Overview, using the site information used to generate your system's TSRF:

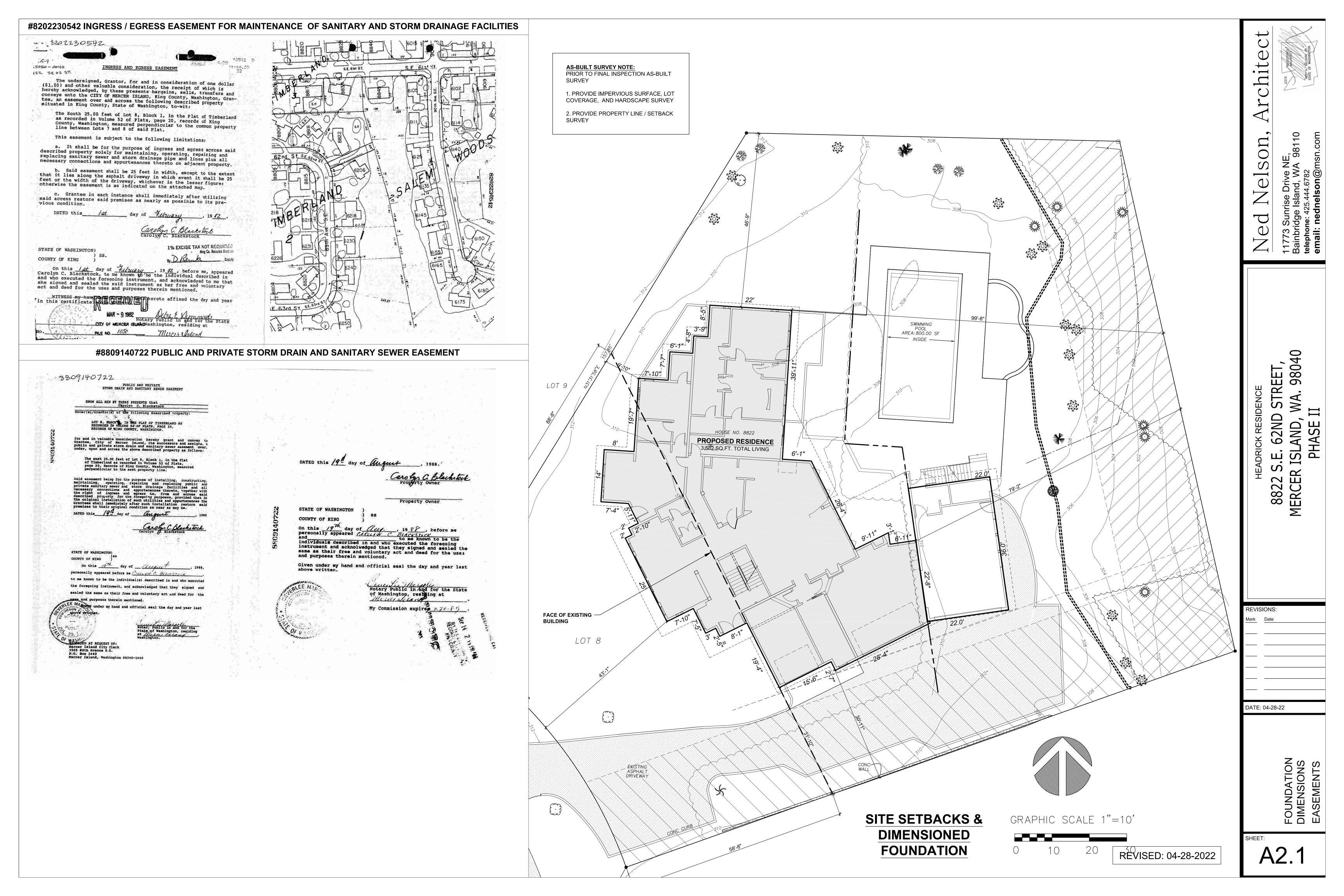
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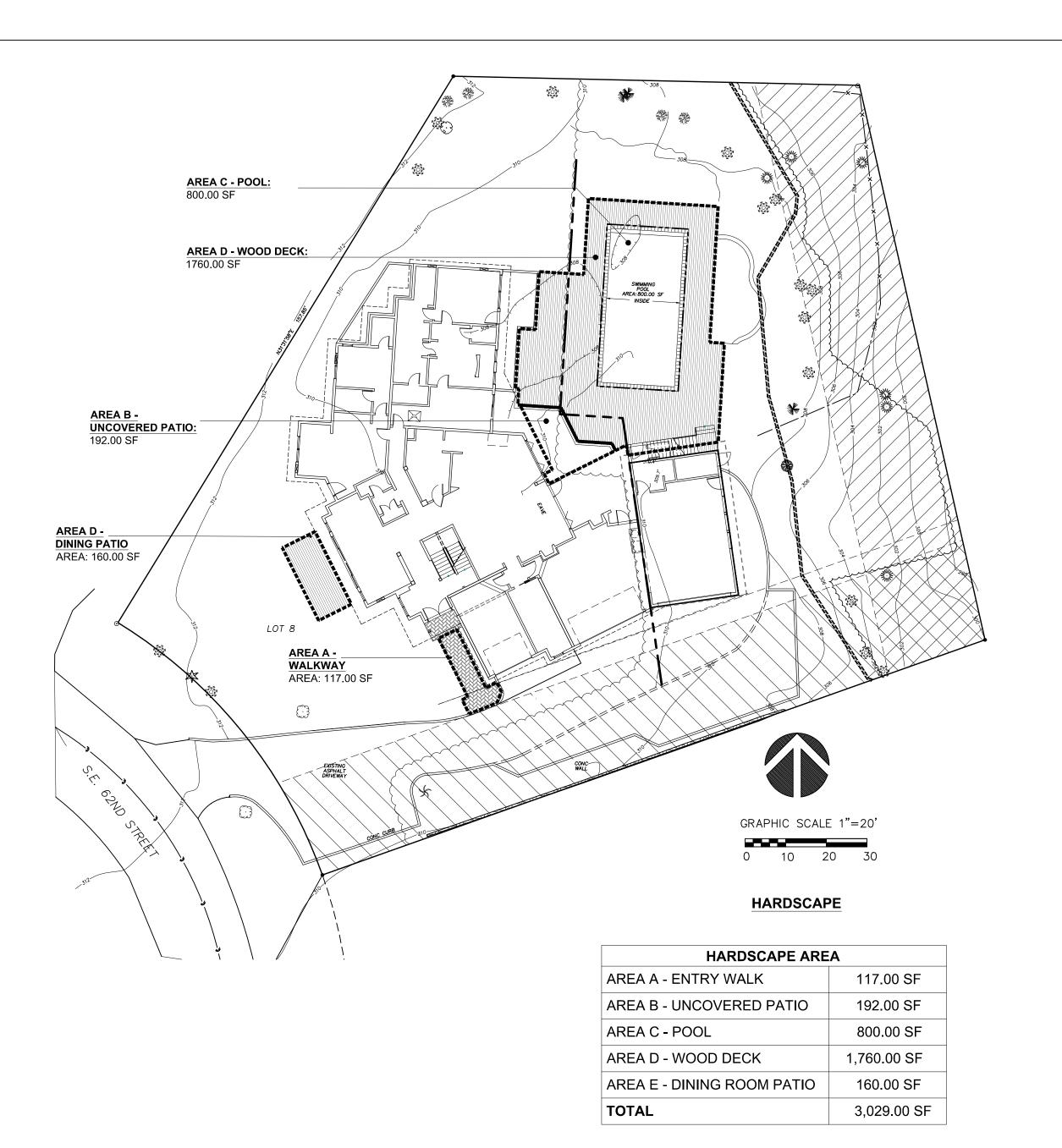
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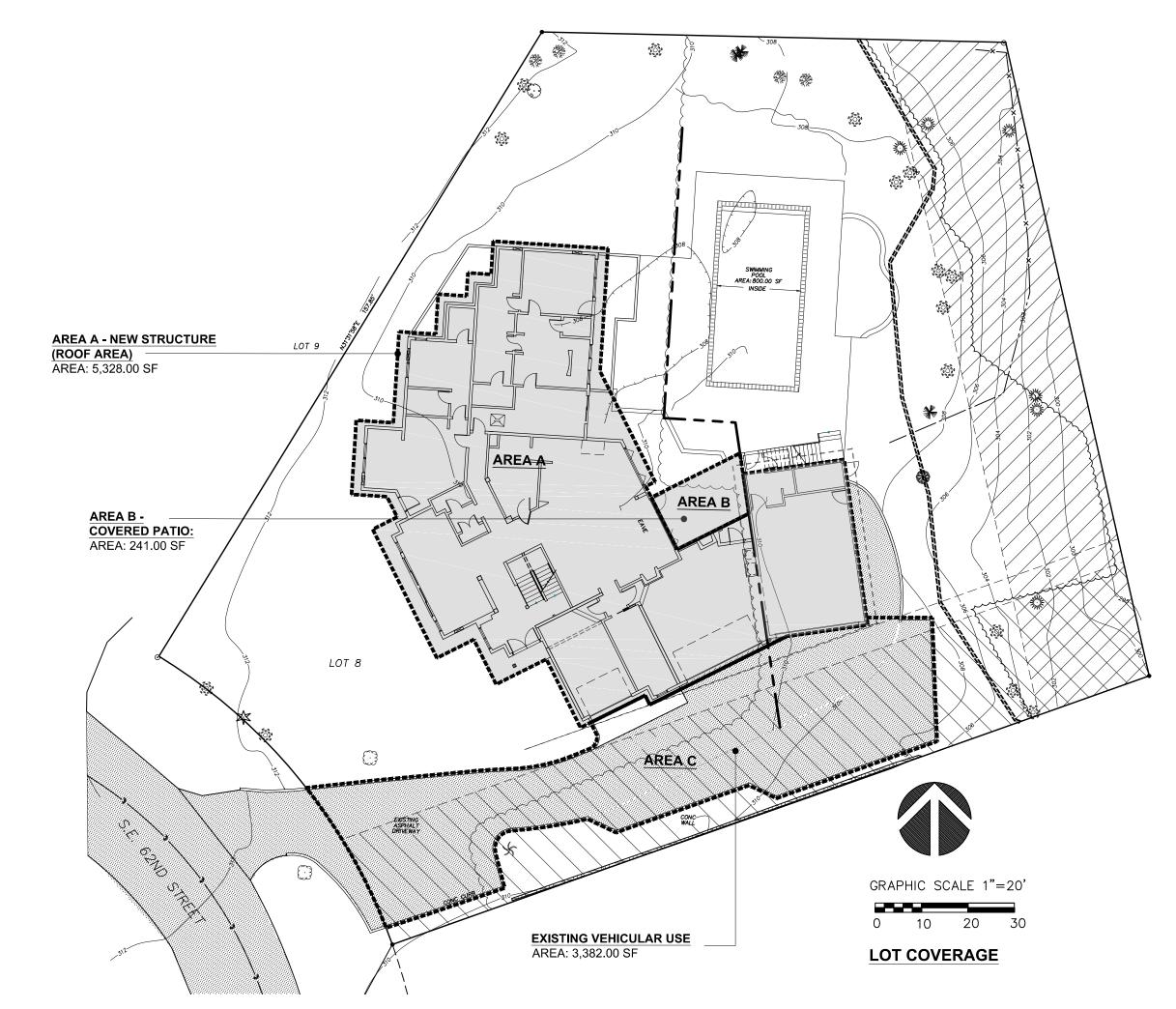
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LOT COVERAGE AR	EA
AREA A - ROOF AREA	6,120.00 SF
AREA B - DRIVEWAY	3,382.00 SF
AREA C - COVERED PATIO	241.00 SF
TOTAL	9,743.00 SF

AS-BUILT SURVEY REQUIREMENTS PRIOR TO FINAL INSPECTION

- LOCATE FOUNDATION FOOTPRINT. SHOW EASEMENTS, CITY MINUMIUM SETBACKS, AND ACTUAL BUILDING SETBACKS
- SHOW LOT COVERAGE BASED UPON "LOT COVERAGE SCHEMATIC" THIS SHEET
- 3. SHOW IMPERVIOUS COVERAGE BASED UPON "IMPERVIOUS SURFACE SCHEMATIC" THIS SHEET

4. SHOW HARDSCAPE COVERAGE BASED UPON "HARDSCAPE SCHEMATIC" THIS SHEET

GENERAL SURVEY NOTE

1. SURVEY REQUIRED TO LOCATE ALL NEW FOUNDATIONS. SEE SHEET A 2.1

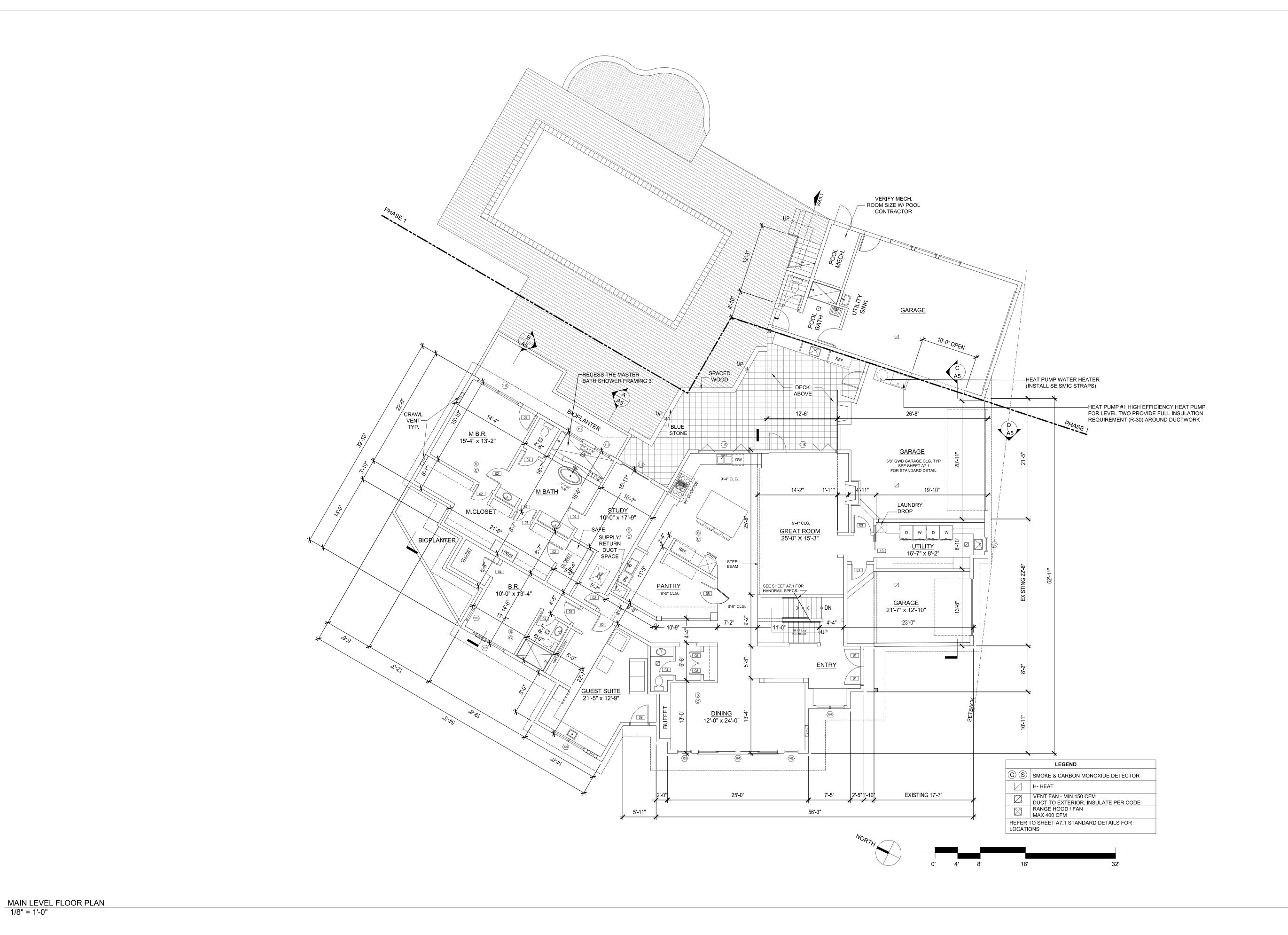
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<u>Mark</u>	Date						

DATE: 04-28-22

REVISED: 04-28-2022



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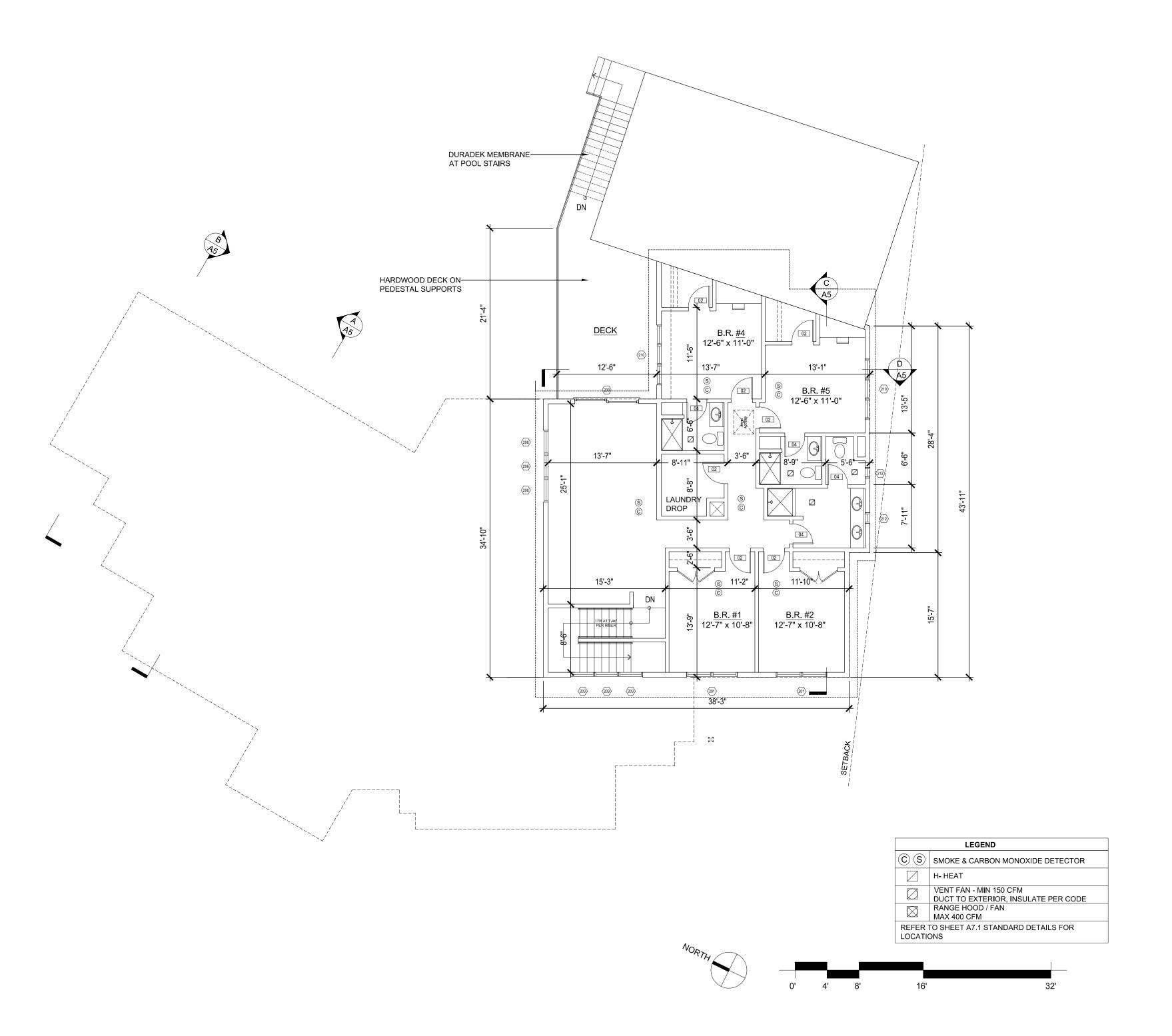
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MAIN LEVEL FLOOR PLAN

A3



SECOND LEVEL FLOOR PLAN
1/8" = 1'-0"

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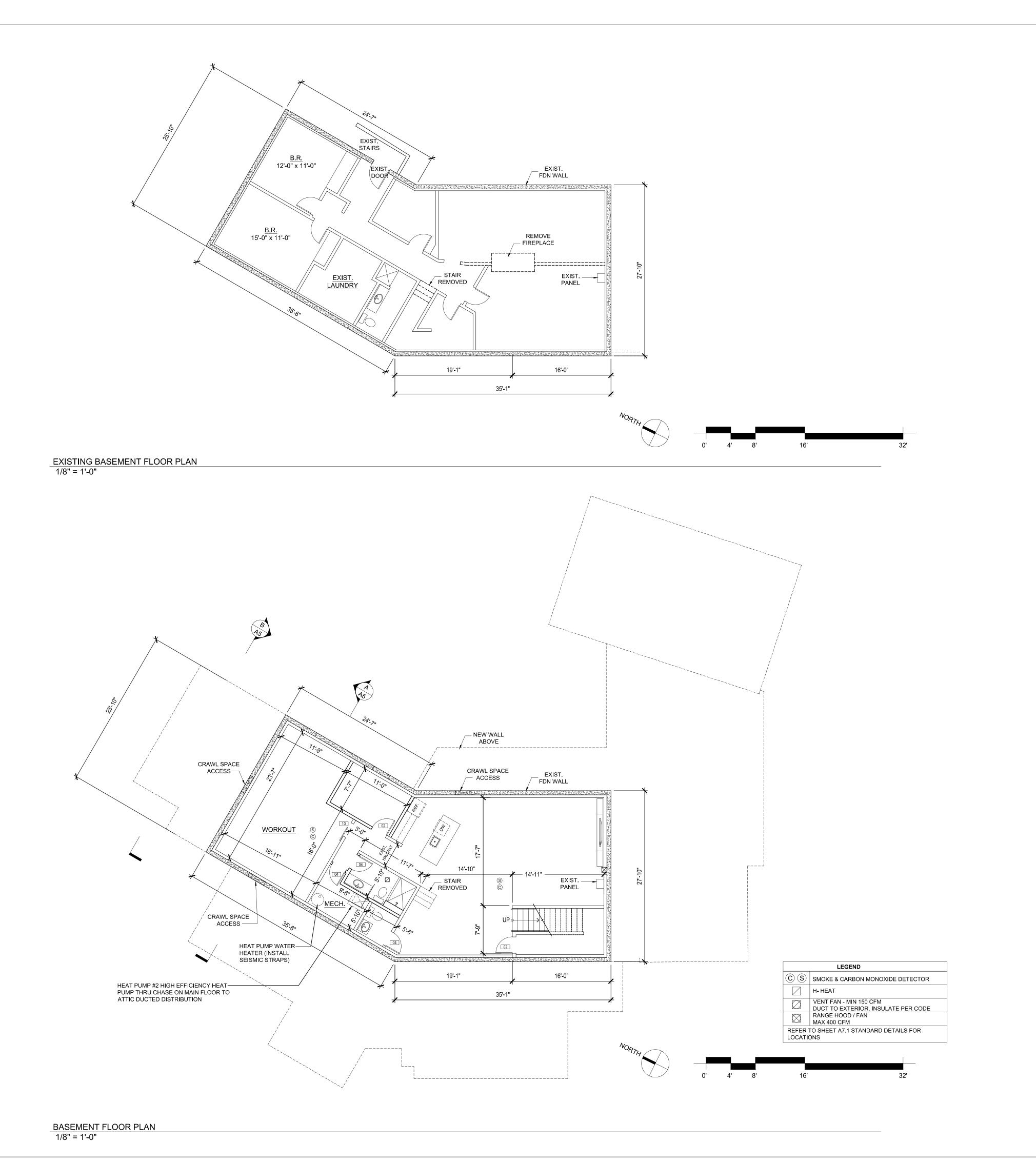
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SECOND LEVEL FLOOR PLAN

SHEET: Λ2 1



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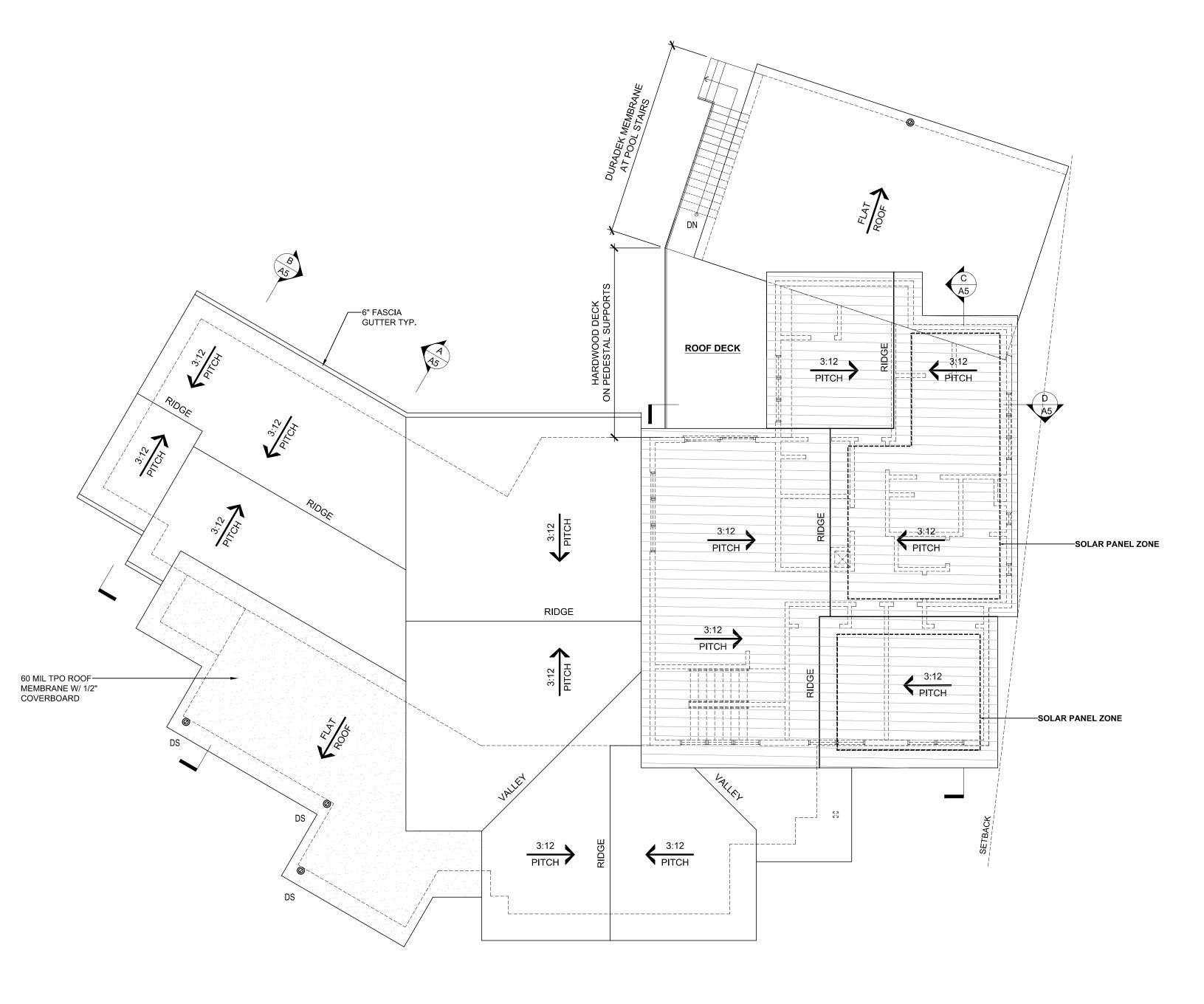
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3ASEMENT FLOOR PLAN

SHEET:

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HEADRICK RESIDENCE

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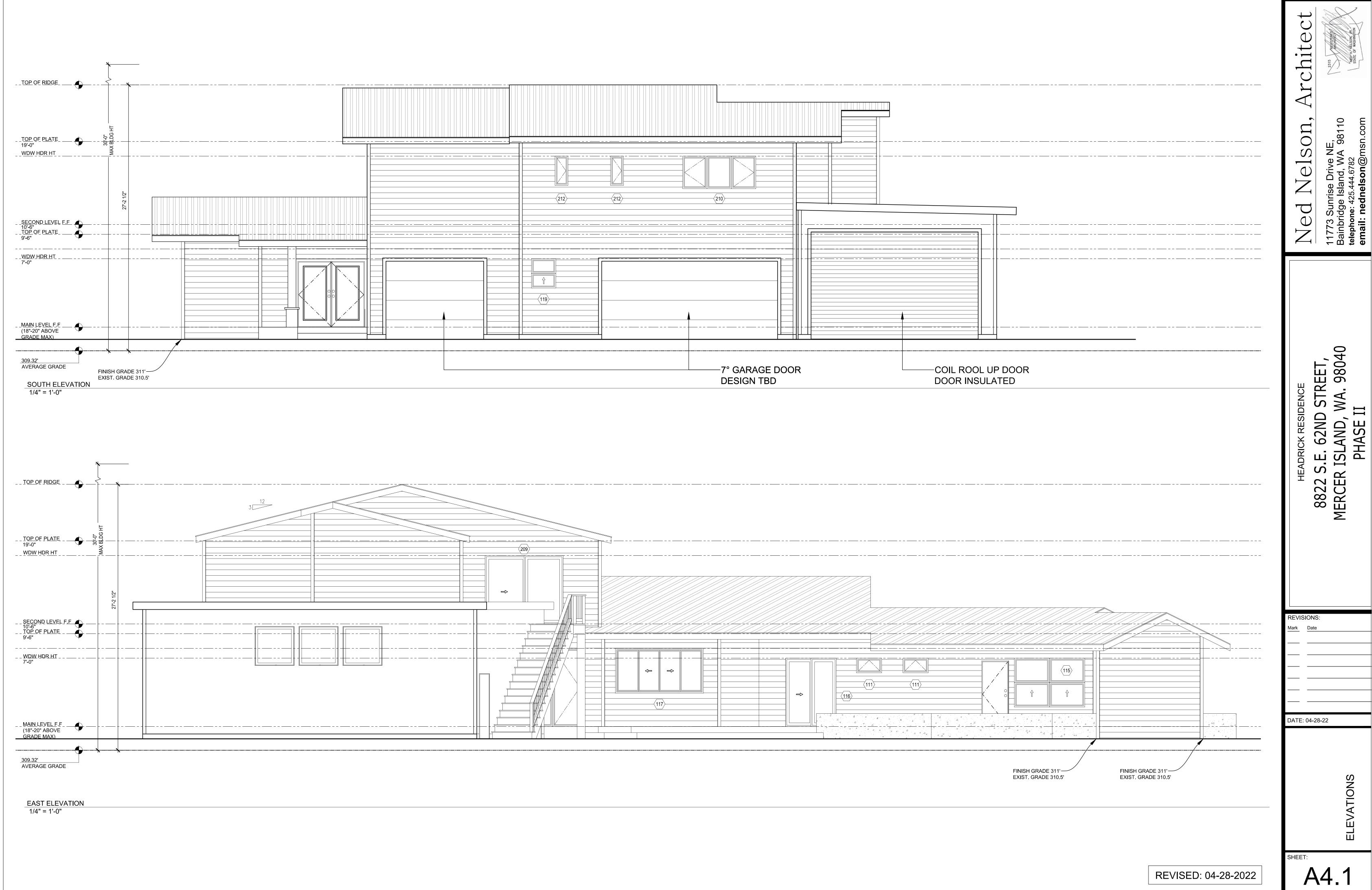
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ROOF PLAN

SHEET: **43** 3



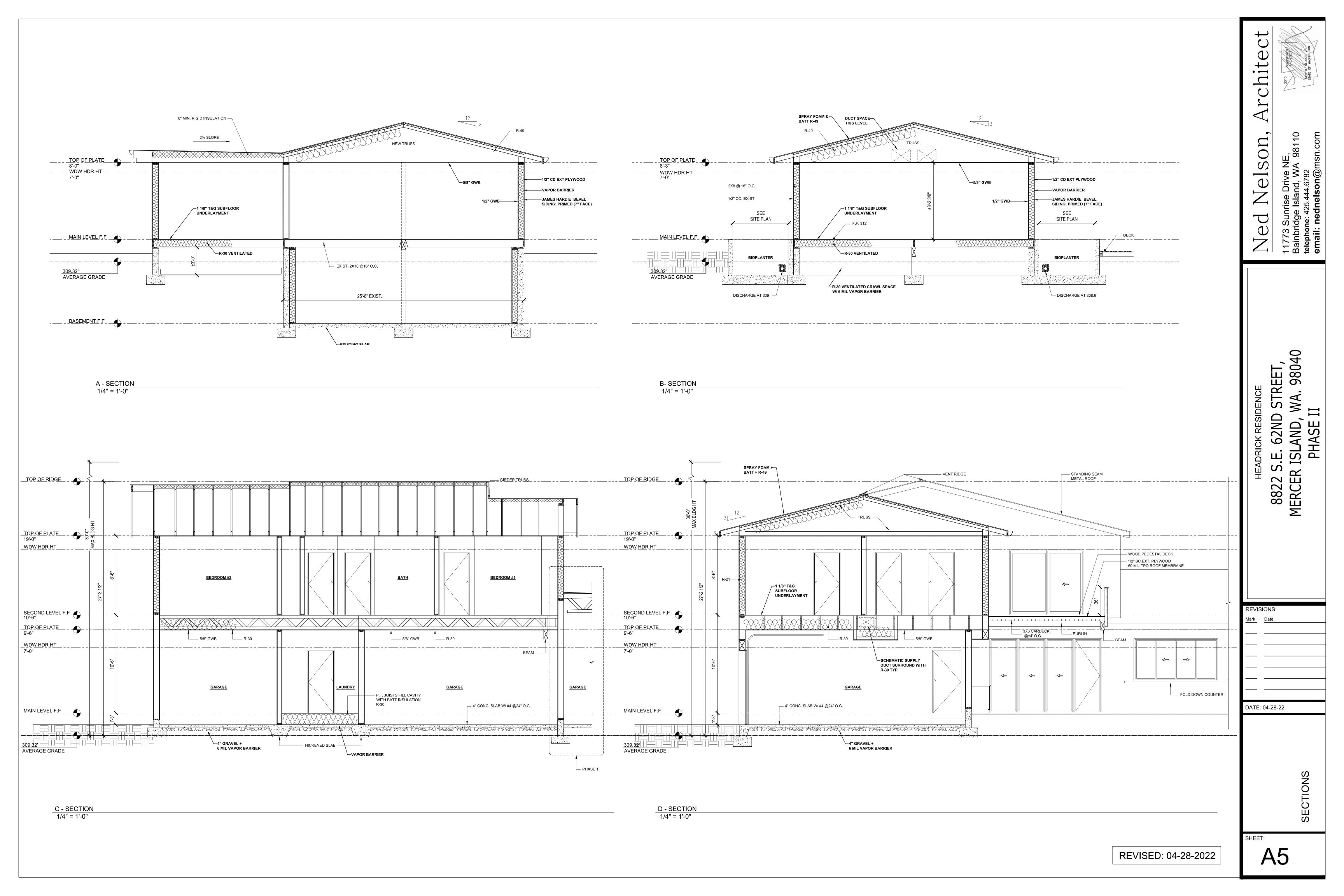


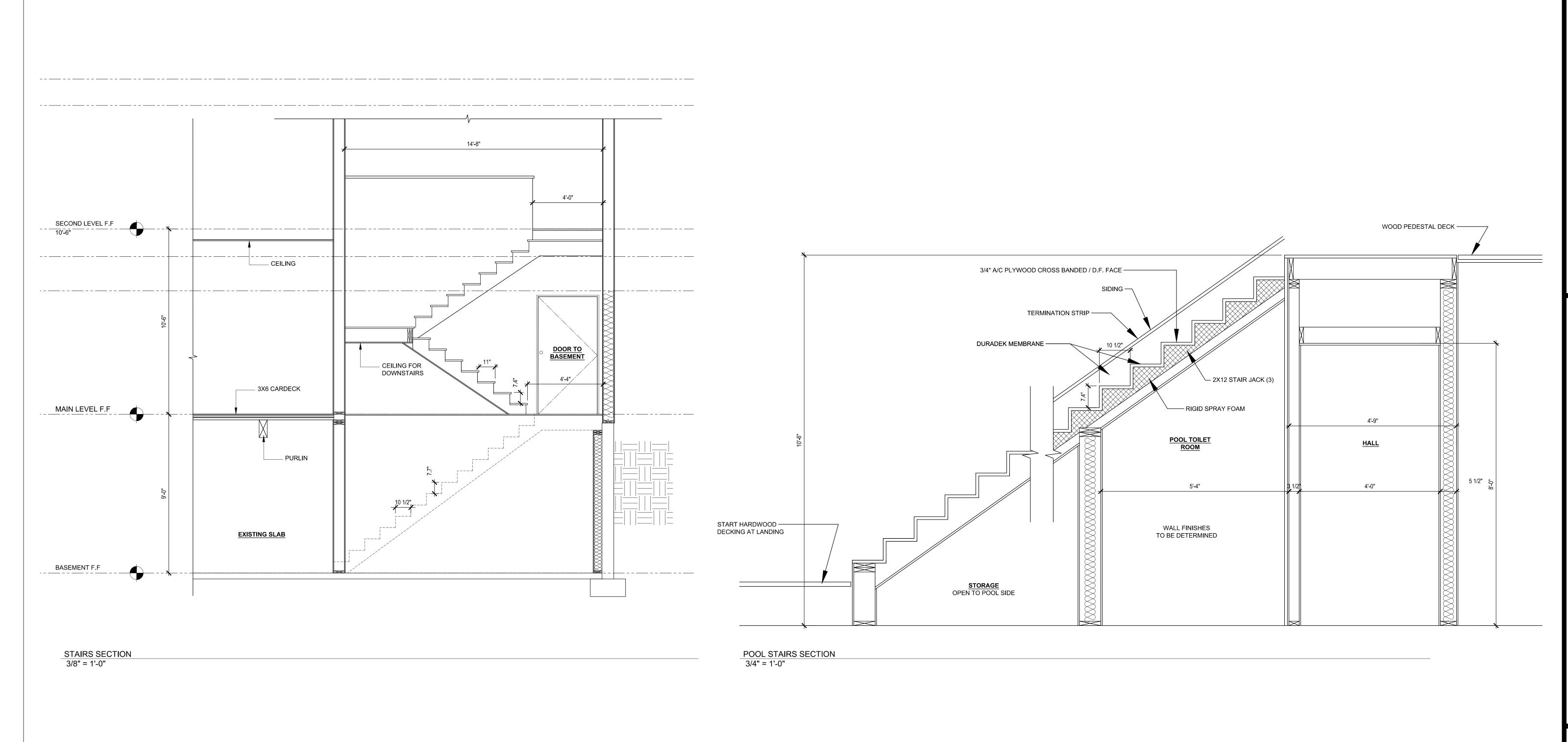


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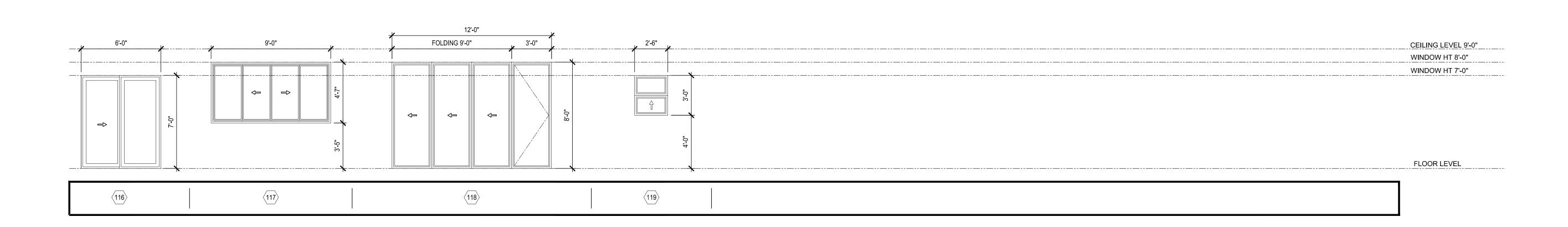
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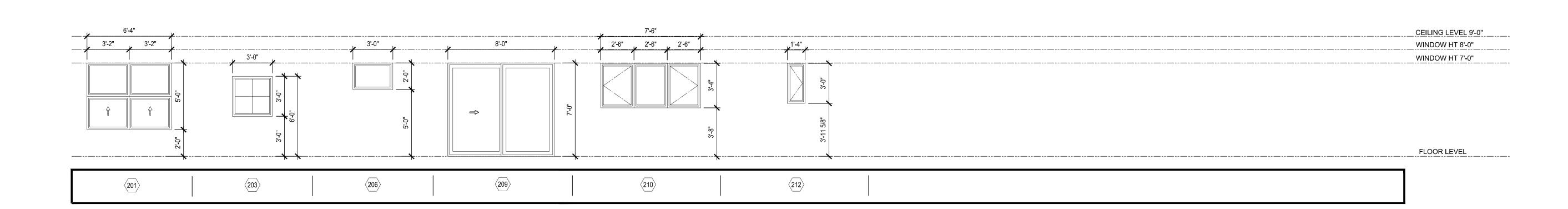
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SECTIONS

Δ





LOCATION ENTRY DINING DINING GUEST FAMILY ROOM GUEST FAMILY ROOM GUEST ROOM M.BATH	1 2 1 2 2 1 1 2 2 2 1 1 2 2 2 1 1 2 2 2 1 1 2 2 2 1 2 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	WIDTH 5'-0" 2'-6" 14'-0" 3'-2" 3'-2" 2'-6"	HEIGHT 6'-0" 6'-0" 8'-0" 3'-6" 5'-0"	AREA (SF) 30 15 112 11 16	MFG MARVIN MARVIN MARVIN MARVIN	NO NO YES	TEMPERED? YES YES YES	OBSCURE? NO NO NO	OPERATION FIXED FIXED SLIDING BI PARTING DOOR	COMMENTS MATCH HORIZONTAL MUNTINS WITH SLIDING DOOR #104 MATCH HORIZONTAL MUNTINS WITH SLIDING DOOR #104 TEMPERED SCREEN
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ROOM GUEST FAMILY ROOM GUEST ROOM	2	3'-2"	5'-0"		MARVIN	\/==				
ROOM GUEST ROOM	1			16		YES	NO	NO	DOUBLE HUNG	PAIR / SCREEN
GUEST ROOM	'	2'-6"		1 10 1	MARVIN	YES	NO	NO	DOUBLE HUNG	PAIR / SCREEN
M.BATH	2		2'-6"	7	MARVIN	YES	NO	NO	CASEMENT	SCREEN
M.BATH	2			5						
		3'-0"	1'-6"	4.5	MARVIN	NO	YES	NO	AWNING	SCREEN
+										
M. BEDROOM	1	4'-2"	5'-0"	21	MARVIN	YES	NO	NO	DOUBLE HUNG	PAIR / SCREEN
STUDY	1	6'-0"	7'-0"	42	MARVIN	YES	YES	NO	SLIDING GLASS DOOR	SCREEN
KITCHEN	1	9'-0"	4'-7"	41	MARVIN	YES	YES	NO	BI FOLD EACH SIDE	
GREAT ROOM	1	12'-0"	8'-0"	96	MARVIN	YES	YES	NO	SPECIAL	
UTILITY	1	2'-6"	3'-0"	7.5	MARVIN	YES	YES	NO	DOUBLE HUNG	SCREEN
BEDROOM #1 #2	2	3'-2"	5'-0"	16	MARVIN	YES	NO	NO	DOUBLE HUNG	PAIR / SCREEN
STAIRS	3	3'-0"	3'-0"	9	MARVIN	NO	YES	NO	FIXED	
FAMILY	3	3'-0"	2'-0"	6	MARVIN	NO	NO	NO	AWNING	
FAMILY	1	8'-0"	7'-0"	56	MARVIN	YES	YES	NO	SLIDING GLASS DOOR	SCREEN
BEDROOM #4	2	2'-6"	3'-4"	8.3	MARVIN	YES	NO	NO	CASEMENT & FIXED	3 / SCREEN
BATH	2	1'-4"	3'-0"	4	MARVIN	YES	YES	NO	CASEMENT	SCREEN
	STAIRS CLERESTORY FAMILY FAMILY BEDROOM #4	STAIRS CLERESTORY FAMILY FAMILY BEDROOM #4 2	STAIRS 3 3'-0" CLERESTORY 3 3'-0" FAMILY 3 3'-0" FAMILY 1 8'-0" BEDROOM #4 2 2'-6"	STAIRS CLERESTORY 3 3'-0" 3'-0" FAMILY 3 3'-0" 2'-0" FAMILY 1 8'-0" 7'-0" BEDROOM #4 2 2'-6" 3'-4"	STAIRS CLERESTORY 3 3'-0" 9 FAMILY 3 3'-0" 2'-0" 6 FAMILY 1 8'-0" 7'-0" 56 BEDROOM #4 2 2'-6" 3'-4" 8.3	STAIRS CLERESTORY 3 3'-0" 9 MARVIN FAMILY 3 3'-0" 2'-0" 6 MARVIN FAMILY 1 8'-0" 7'-0" 56 MARVIN BEDROOM #4 2 2'-6" 3'-4" 8.3 MARVIN	STAIRS CLERESTORY 3 3'-0" 9 MARVIN NO FAMILY 3 3'-0" 2'-0" 6 MARVIN NO FAMILY 1 8'-0" 7'-0" 56 MARVIN YES BEDROOM #4 2 2'-6" 3'-4" 8.3 MARVIN YES	STAIRS CLERESTORY 3 3'-0" 9 MARVIN NO YES FAMILY 3 3'-0" 2'-0" 6 MARVIN NO NO FAMILY 1 8'-0" 7'-0" 56 MARVIN YES YES BEDROOM #4 2 2'-6" 3'-4" 8.3 MARVIN YES NO	STAIRS CLERESTORY 3 3'-0" 9 MARVIN NO YES NO FAMILY 3 3'-0" 2'-0" 6 MARVIN NO NO NO FAMILY 1 8'-0" 7'-0" 56 MARVIN YES YES NO BEDROOM #4 2 2'-6" 3'-4" 8.3 MARVIN YES NO NO	STAIRS CLERESTORY 3 3'-0" 9 MARVIN NO YES NO FIXED FAMILY 3 3'-0" 2'-0" 6 MARVIN NO NO NO AWNING FAMILY 1 8'-0" 7'-0" 56 MARVIN YES YES NO SLIDING GLASS DOOR BEDROOM #4 2 2'-6" 3'-4" 8.3 MARVIN YES NO NO CASEMENT & FIXED

WINDOW NOTES

1. EGRESS NOTES: SILL HEIGHT ≤ 44"

CLEAR WIDTH ≥ 20"

CLEAR HEIGHT ≥ 24"

NET AREA ≥ 5.7 SQ. FT.

2. WINDOW SIZES ARE BASED ON FRAMED ROUGH OPENING.

WINDOW MANUFACTURER TO SIZE WINDOWS ACCORDINGLY. ALL DIMENSIONS (INCLUDING FRAMES AND ROUGH OPENINGS) SHALL BE FIELD VERIFIED PRIOR TO ORDERING. ALL OPERABLE WINDOWS TO HAVE SCREENS. ALIGN WINDOW HEADS WITH EXTERIOR DOORS. U.N.O. FLASHING PER MANUFACTURER'S SPECIFICATIONS.

GLAZING TO BE NFRC LABELED PER 2018 WSEC R303.1.3

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Architect

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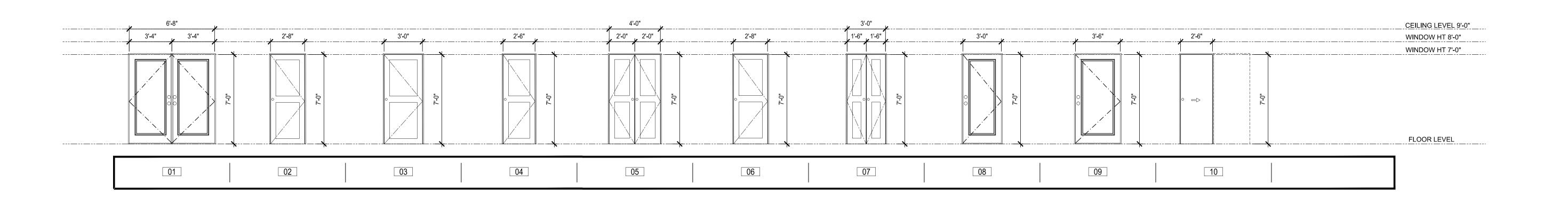
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WINDOW SCHEDULE

SHEET: **A6**

REVISED: 04-28-2022



				DO	OR SCH	EDULE		
	TAG	LOCATION	COUNT	WIDTH	HEIGHT	TEMPERED?	OPERATION	COMMENTS
LEVEL 1	01	ENTRY	2	3'-4"	7'-0"	NO		PAIR
	02	BEDROOMS	7	2'-8"	7'-0"	NO		
	03	GARAGE	2	3'-0"	7'-0"	NO		SOLID CORE - 30 MIN. RATED SELF CLOSING AND LATCHING
	04	BATH	4	2'-6"	7'-0"	NO		
	05	CLOSET	2	2'-0"	7'-0"	NO		PAIR
	06	PANTRY	1	2'-8"	7'-0"	NO		
	07	MASTER CLOSET	2	1'-6"	7'-0"	NO		PAIR
	08	MASTER BEDROOM	1	3'-0"	7'-0"	NO		
	09	ENTRY	1	3'-6"	7'-0"	NO		
	10	LAUNDRY	1	2'-10"	7'-0"	NO		POCKET
LEVEL 2	02	BEDROOMS	7	2'-8"	7'-0"	NO		
	04	BATH	4	2'-6"	7'-0"	NO		
BASEMENT	02	BEDROOMS	2	2'-8"	7'-0"	NO		
	04	BATH	3	2'-6"	7'-0"	NO		
	10	WORKOUT	1	2'-6"	7'-0"	NO		POCKET

DOOR NOTES

- BUILDING ENTRANCE DOOR, INCLUDING GARAGE DOOR, SHALL BE CAPABLE OF LOCKING
- THEY SHALL BE EQUIPPED WITH A DEAD-LOCKING LATCH BOLT WITH AT LEAST A 1/2" THROW THAT PENETRATES THE STRIKER NOT LESS THAN 1/4".
 BUILDING ENTRANCE DOORS SHALL BE OPENABLE FROM
- THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
 EVERY BUILDING ENTRANCE, EXCLUDING THE GARAGE DOOR, SHALL HAVE A VISITOR OBSERVATION PORT OR
- GLASS SIDE LIGHT.

 OBSERVATION PORTS SHALL BE INSTALLED AT MIN 54"
 A.F.F. AND MAX 66" A.F.F.
- DEADBOLTS OR OTHER APPROVED LOCKING DEVICES
 SHALL BE PROVIDED ON ALL SLIDING DOORS AND
 OPERABLE WINDOWS. THE LOCK SHALL BE INSTALLED SO
 THAT THE MOUNTING SCREWS FOR THE LOCK ARE
 INACCESSIBLE FROM THE OUTSIDE.

REVISED: 04-28-2022

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PHASE II

REVISIONS:

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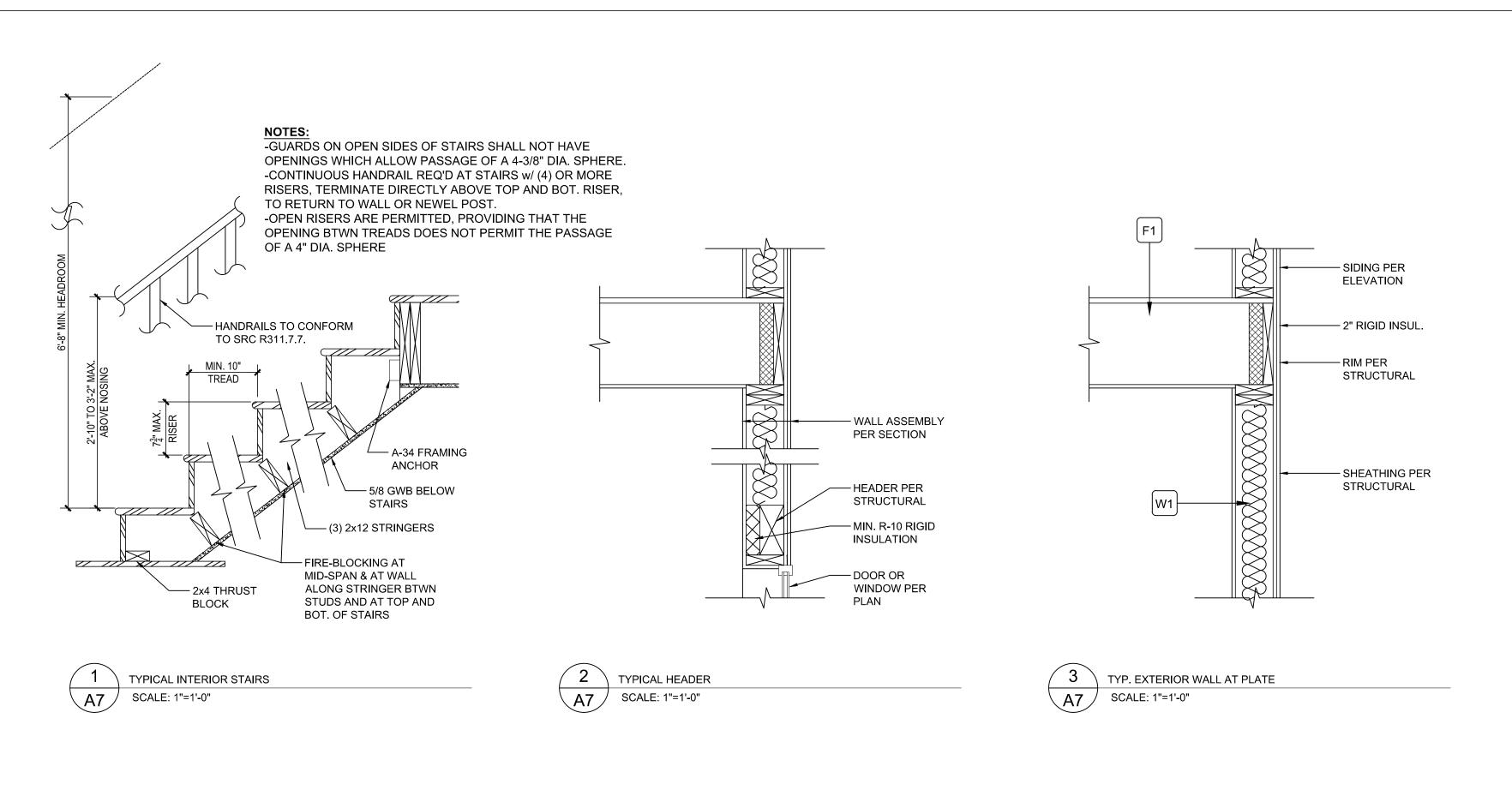
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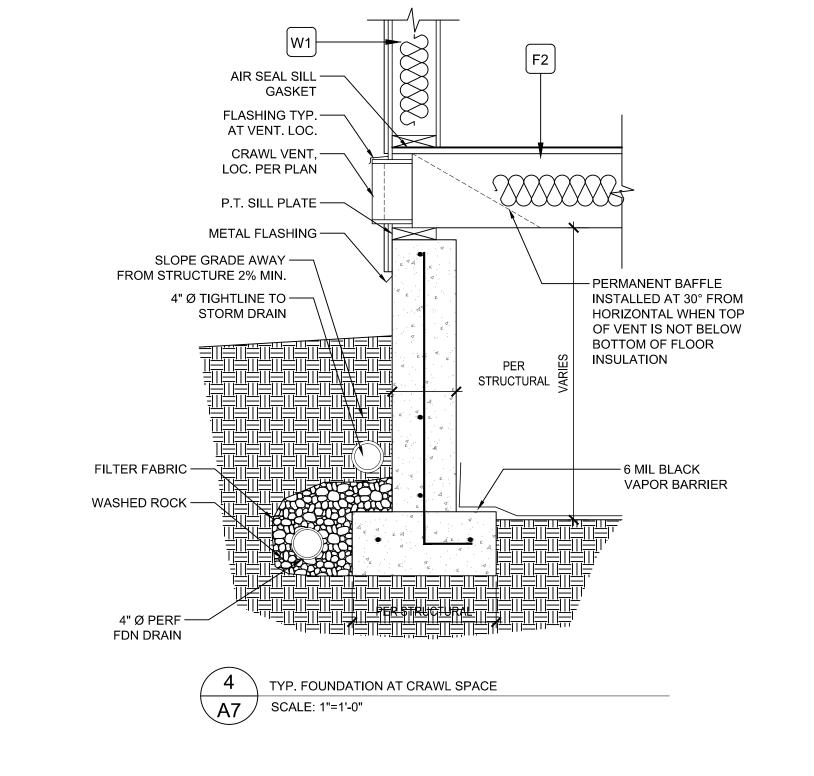
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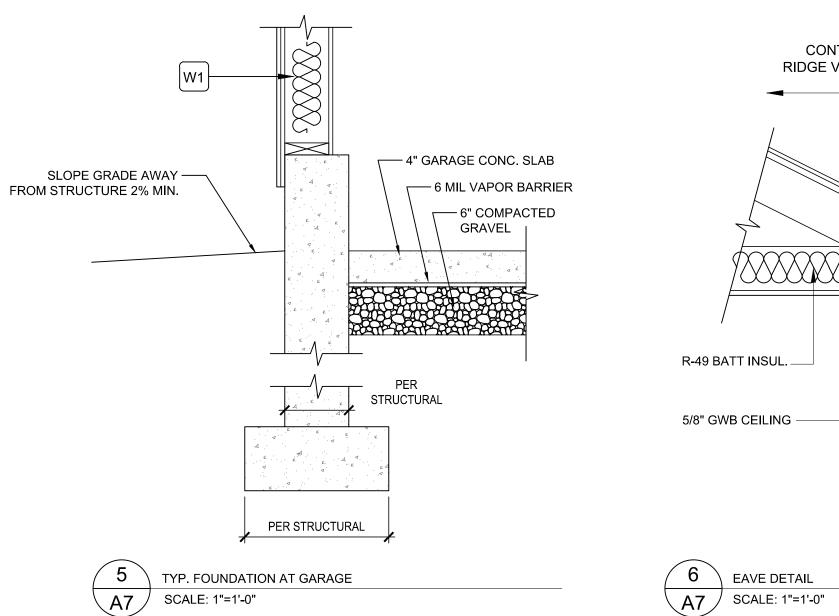
DOOR SCHEDULE

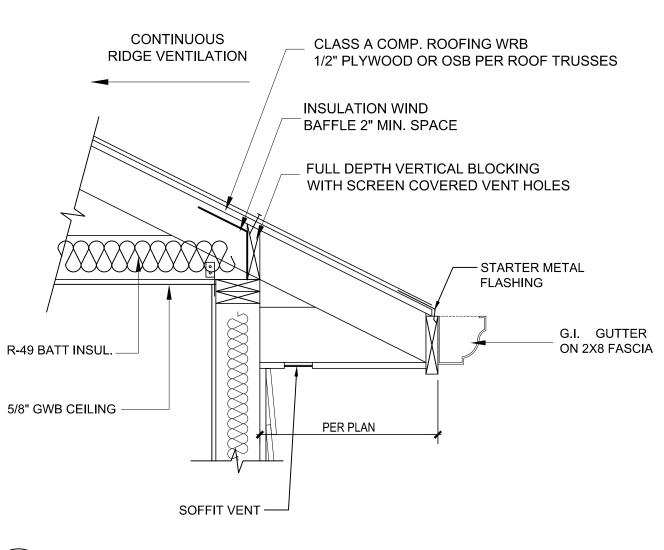
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6 EAVE DETAIL
A7 SCALE: 1"=1'-0"

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DETAILS

Residential Handrails

This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

Where Required

Handrails are required on at least one side of each continuous run of treads or flight with four or more risers.

Typical Details

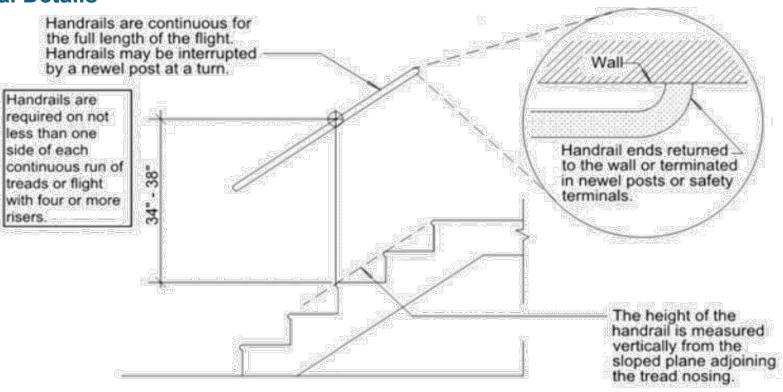


Figure 1: Typical Handrail Elevation (IRC R311.7.8)

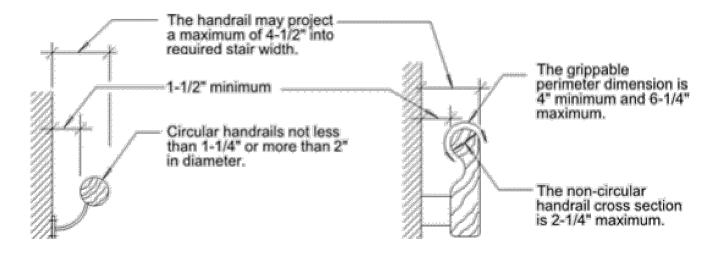


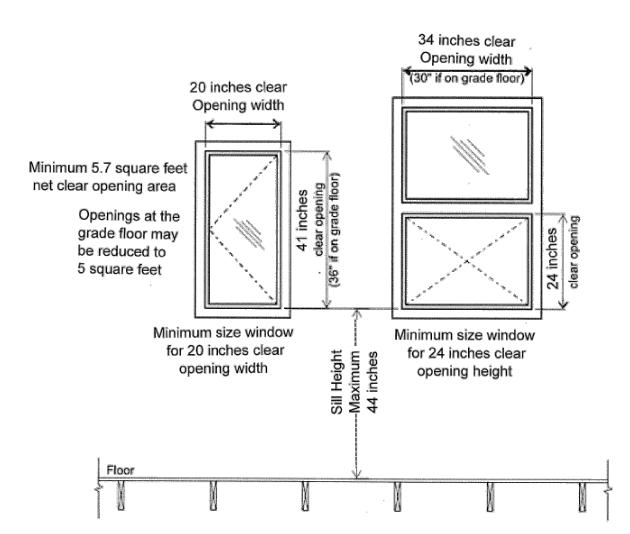
Figure 2: Type I Handrails (IRC R311.7.8.5)

Residential Emergency Egress Openings

This Tip Sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

Emergency Escape and Rescue Opening

- ☐ Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall be operational from the inside without the use of keys, tools, or special knowledge, and open directly into a public way, or to a yard or court that opens to a public way. (R310.1)
- ☐ Where bars, grilles, covers, screens, or opening control devices are placed on emergency escape and rescue openings, area or window wells, the minimum net clear opening sizes shall comply and such devices shall be releasable or removable from the inside without the use of key, tool, special knowledge, or force greater than that required for normal operation of the escape and rescue opening. (R310.4)

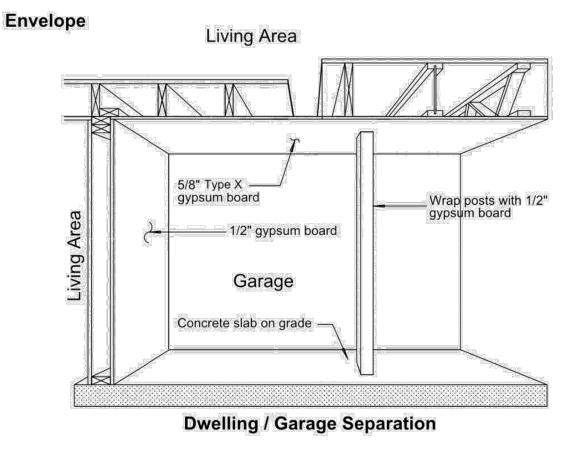


Residential Garage Separation

This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

IRC Table R302.6 - Dwelling/Garage Separation

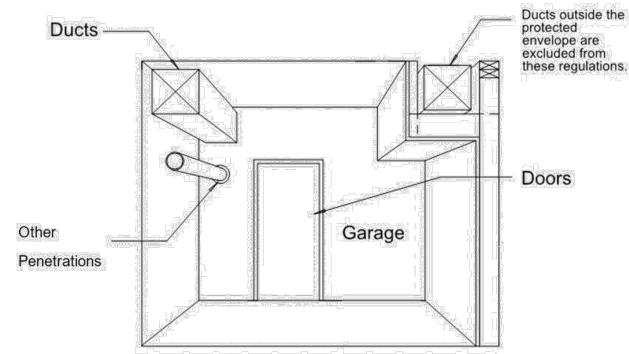
Access	Material
From the residence and attics	Not less than 1/2-inch gypsum board or equivalent
	applied to the garage side
From habitable rooms above the garage	Not less than 5/8-inch Type X gypsum board or
	equivalent
Structure(s) supporting floor/ceiling assemblies	Not less than 1/2-inch gypsum board or equivalent
used for separation required by this section	
Garages located less than 3 feet from a dwelling	Not less than 1/2-inch gypsum board or equivalent
unit on the same	applied to the interior side of exterior walls that are



Fastening of Gypsum Board per IRC Table R702.3.5

- □ 5/8-inch Type X gypsum board at garage ceiling beneath habitable rooms to be fastened with: o 1-7/8-inch 6d cooler nails, or 1-1/4-inch Type W screws, at 6 inches on center when the framing is 24 inches on center maximum.
- \Box 1/2-inch gypsum board at walls separating the garage from the dwelling to be fastened with:
 - o 1-5/8-inch 5d cooler nail at 8 inches on center, or 1-1/4-inch Type W screws at 16 inches on center, when framing is 16 inches on center maximum.
 - o 1-5/8-inch 5d cooler nails at 8 inches on center, or 1-1/4-inch Type W screws at 12 inches on center, when framing is 24 inches on center maximum.

Penetrations (at the Protected Envelope)



Duct Penetrations

Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage must be a minimum of No. 26 gauge sheet metal with no register outlets (openings) into the garage. (R302.5.2)

Other Penetrations

Penetrations through the required separation must be protected at openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion. The material filling this annular space shall not be required to meet the ASTM E 136 requirements. (R302.11, Item 4)

Doors

Doors separating the garage and living spaces shall be solid wood doors not less than 1-3/8 inches thick, solid or honeycomb-core steel not less than 1-3/8 inches thick, or 20-minute rated doors, equipped with a self-closing device. These doors shall not open into a sleeping room. (R302.5.1)

Smoke, Heat, and Carbon Monoxide Alarms

This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments and the 2016 edition of NFPA 72.

Definitions

- ☐ Smoke alarm: A device designed to respond when it senses smoke, typically as an indicator of
- ☐ **Heat alarm:** A device designed to respond when it senses a rise in temperature, typically as an indicator of fire.
- ☐ Carbon monoxide alarm: A device designed to respond when it senses carbon monoxide, a poisonous gas.
- ☐ **All alarms** shall be UL listed and installed per manufacturer instructions. (R314.1.1, R315.1.1)

New Construction

- ☐ Smoke alarms and carbon monoxide alarms shall be installed throughout each dwelling unit in all required locations. (R314.2.1, R315.2.1)
- ☐ A heat detector shall be provided in each new attached garage. (R314.2.3)
- ☐ Smoke alarms, heat alarms, and carbon monoxide alarms shall receive their **primary power** from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. (R314.6, R315.6)
- ☐ Where more than one smoke alarm is required to be installed within an individual dwelling unit, the alarm devices shall be **interconnected** in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. (R314.4, R315.5)
- ☐ Heat alarms shall be **connected** to a heat alarm or smoke alarm that is installed in the dwelling unit. Alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification. (R314.4.1)
- ☐ Physical interconnection of smoke alarms shall not be required where **listed wireless alarms** are installed and all alarms sound upon activation of one alarm. (R314.4, R315.5)

Required Locations

- ☐ A **smoke alarm** shall be located in each sleeping room or sleeping loft. (R314.3)
- ☐ A **smoke alarm** shall be located in each napping area of a family home childcare. (R314.3)
- ☐ A **smoke alarm** and a **carbon monoxide alarm** (or combination smoke and carbon monoxide alarm) shall be located outside each sleeping area in the immediate vicinity of the bedroom(s). (R314.3, R315.3)
- ☐ At least one **smoke alarm** and one **carbon monoxide alarm** shall be located on each floor level, including basements and habitable attics. (R314.3, R315.3)
- ☐ In split level floor plans, at the upper level, provided there is no intervening door between adjacent levels and the lower level is less than a full story below the upper level. (R314.3)
- ☐ A **carbon monoxide alarm** is required in a bedroom when a fuel-burning appliance is installed in the bedroom or its attached bathroom. (R315.3)
- ☐ A combination alarm (**combined smoke and carbon monoxide alarm**) is acceptable in any required location. (R314.5, R315.4)
- ☐ A **heat alarm** is required in each new attached garage. (R314.2.3)

Alarms and Detectors Near Cooking Appliances per NFPA 72 Refer to Figure 2:

- A. **Photoelectric** smoke alarms shall not be installed less than 6 feet horizontally from a permanently installed cooking appliance. (NFPA 72 29.8.3.4 (4))
- B. **Ionization** smoke alarms with an alarm-silencing switch must not be less than 10 feet from a permanent cooking appliance. (NFPA 72 29.8.3.4 (4))
- C. **Ionization** smoke alarms <u>without</u> an alarm-silencing switch must not be less than 20 feet from a permanent cooking appliance. (NFPA 72 29.8.3.4 (4))

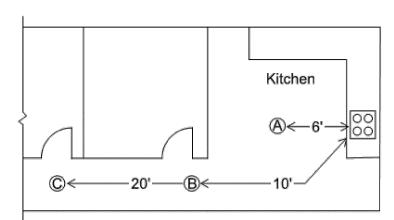


Figure 2: Smoke Alarms and Smoke Detectors Near Cooking Appliances

Carbon Monoxide Alarm Location Limitations

- ☐ Do not place alarms directly above or beside fuel-burning appliances.
- ☐ Do not place alarms in direct sunlight.
- ☐ Do not place alarms in low areas where children can reach. Do not place alarms behind curtains or any structure that might prevent carbon monoxide from reaching the sensor.

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GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

CRITERIA

ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).

2. DESIGN LOADING CRITERIA

25 PSF ROOF SNOW LOAD ROOF DEAD LOAD ALLOWANCE FOR PV PANELS (IN DESIGNATED AREAS) FLOOR LIVE LOAD (RESIDENTIAL) 40 PSF FLOOR LIVE LOAD (RESIDENTIAL EXTERIOR DECKS AND BALCONIES) MECHANICAL UNITS WEIGHTS FURNISHED BY MANUFACTURER

<u>SNOW</u> ROOF SNOW LOAD = 25 PSF GROUND SNOW LOAD = 20 PSF

EXPOSURE Ce = 1.00 IMPORTANCE FACTOR Is = 1.00 THERMAL FACTOR Ct = 1.00

MIND: ANALYSIS PROCEDURE: ASCE 7-16 CHAPTER 27 "PART I - BUILDINGS OF ALL HEIGHTS"

RISK CATEGORY II EXPOSURE "D"

TOPOGRAPHIC FACTOR Kzt = 1.3 WIND BASE SHEAR, NORTH/SOUTH VW = 41.9 K

WIND BASE SHEAR, EAST/WEST VW = 39.7 K

EARTHQUAKE ANALYSIS PROCEDURE: IBC "EQUIVALENT LATERAL FORCE PROCEDURE"

> SEISMIC DESIGN CATEGORY (SDC) = D RISK CATEGORY = II

SEISMIC SITE CLASS = C IMPORTANCE FACTOR le = 1.0

MAPPED MCE Ss = 1.457; S1 = 0.505

DESIGN ACCELERATION Sds = 1.165; Sd1 = 0.503

SEISMIC RESISTING SYSTEM: WOOD PANEL BEARING SHEAR WALL, R = 6.5 SEISMIC BASE SHEAR Vs = 22.92 K

- 3. LATERAL LOADS ARE TRANSFERRED BY THE ROOF AND FLOOR DIAPHRAGMS TO THE SHEAR WALLS. FORCES ARE BASED ON THE TRIBUTARY AREA FOR EACH SHEAR WALL AND ARE CARRIED BY THE SHEAR WALLS TO THE FOUNDATION.
- 4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- 5. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.
- 6. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THEIR WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- 8. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- 9. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. WHERE INFORMATION ON THE DRAWINGS IS IN CONFLICT WITH THE SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. DO NOT SCALE THE DRAWINGS.
- 10. ALL STRUCTURAL SYSTEMS WHICH ARE COMPOSED OF FIELD ERECTED COMPONENTS SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

<u>GEOTECHNICAL</u>

II. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH (CONTROLLED, COMPACTED STRUCTURAL FILL OR BOTH) AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND GEOTECHNICAL ENGINEER. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED UNDER COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE GEOTECHNICAL REPORT.

THE STRUCTURAL DESIGN IS BASED ON THE FOLLOWING VALUES FROM THE REFERENCED GEOTECHNICAL REPORT ALLOWABLE SOIL BEARING PRESSURE 3,000 PSF LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED) 35 PCF + IOH / 35 PCF SEISMIC SURCHARGE PRESSURE (RESTRAINED) PASSIVE SOIL PRESSURE 300 PCF SOIL COEFFICIENT OF FRICTION 0.50 130 PCF SOIL DENSITY

GEOTECHNICAL REPORT REFERENCE: #19086 BY GEOTECH CONSULTANTS, INC. DATED MARCH 20, 2019

CONCRETE

12. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301. CONSTRUCTION TOLERANCES SHALL NOT EXCEED THOSE LISTED IN ACI 117. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF F'C = 2,500 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS (BEFORE THE ADDITION OF ADMIXTURES). THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.55 FOR FOOTINGS AND 0.45 FOR ALL SLABS AND EXPOSED CONCRETE UNLESS OTHERWISE NOTED. EXCEPT FOR FOOTINGS AND SLAB ON GRADE, AGGREGATE SIZE SHALL NOT EXCEED

THE MINIMUM AMOUNT OF CEMENT AND THE MAXIMUM SLUMP MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. (THE W/C RATIO LIMITS STILL APPLY). THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, CEMENTITIOUS MATERIAL, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 301. CHEMICAL ADMIXTURES AND FLY ASH SHALL CONFORM TO ASTM C494 AND C618 RESPECTIVELY. FLY ASH PERCENTAGE OF TOTAL CEMENTITIOUS MATERIAL SHALL NOT EXCEED 20%. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY TO CONTRACT DOCUMENTS. CONTRACTOR MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14 TABLE 19.3.3.1. ALL CONCRETE EXPOSED TO THE WEATHER AND ALL GARAGE SLABS-ON-GRADE SHALL OBTAIN A 28-DAY STRENGTH I'C OF 3,000 PSI IN ACCORDANCE WITH ACI 318 TABLE 19.3.2.1 AND 1BC SECTION 1904.1. THIS INCREASE IN REQUIRED STRENGTH IS FOR DURABILITY ONLY (SPECIAL INSPECTION IS NOT REQUIRED). ALL CONCRETE TO RECEIVE A STEEL TROWELED FINISH SHALL NOT BE AIR-ENTRAINED.

13. REINFORCING STEEL (FOR RESIDENTIAL) SHALL CONSIST OF #4 BARS CONFORMING TO ASTM A615, GRADE 40, fy = 40,000 PSI AND SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT 48 BAR DIAMETERS, 2'-O" MINIMUM, PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS, LAP 2'-0" MINIMUM. PROVIDE (2) #4 MIN. U.N.O. TRIM BARS AROUND ALL OPENINGS IN CONCRETE WALLS OR SLABS EXTENDING 2'-O" PAST CORNERS, TYPICAL.

MELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM. OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. NO REINFORCING BARS SHALL BE "WET-SET" INTO THE CONCRETE. PROVIDE A 20' LONG REBAR GROUND (UFER GROUND) PER ELECTRICIAN.

14. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST EARTH FORMED SURFACES EXPOSED TO EARTH (i.e. WALLS BELOW GROUND) OR WEATHER SLABS AND WALLS (INTERIOR FACE)

15. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.

ANCHORAGE

16. SCREW ANCHORS INTO CONCRETE SHALL BE "TITEN HD", AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-2713 INCLUDING STANDARD EMBEDMENT REQUIREMENTS U.O.N. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION IS REQUIRED FOR ALL SCREW ANCHOR INSTALLATION.

17. FRAMING LUMBER: SHALL BE KILN DRIED OR MC-19 (MOISTURE CONTENT LESS THAN 19%), AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD NO. 17 GRADING RULES FOR WEST COAST LUMBER. FURNISH TO THE FOLLOWING MINIMUM STANDARDS: JOISTS (2X, 3X, AND 4X MEMBERS)

DOUGLAS FIR OR HEM-FIR NO. I

BEAMS AND STRINGERS (INCLUDING 6 X AND LARGER MEMBERS) DOUGLAS FIR NO.

DOUGLAS FIR NO. POSTS AND TIMBERS

STUDS, PLATES & MISCELLANEOUS LIGHT FRAMING (AS NOTED ON PLANS / DETAILS)

DOUGLAS FIR OR HEM-FIR NO. 2

- 18. WOOD SETTLEMENT SHRINKAGE: DUE TO CROSS GRAIN WOOD SHRINKAGE, THIS BUILDING IS EXPECTED TO SETTLE APPROXIMATELY 1/8 TO 1/4 INCH PER STORY. ALL UTILITIES SHALL BE DESIGNED WITH FLEXIBLE JOINTS OR OTHER MEANS TO APPROPRIATELY ACCOMMODATE THIS NORMAL SETTLEMENT. ALL INTERIOR AND EXTERIOR SHEATHING AND FINISHES SHALL BE INSTALLED SUCH THAT NO DAMAGE WILL OCCUR. SHRINKAGE IS EXPECTED IN THE THICKNESS OF THE WALL PLATES AND NOT IN THE LENGTH OF THE WALL STUDS.
- 19. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM D3737 AND ANSI A190.1 STANDARDS, EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. CERTIFICATES OF CONFORMANCE MUST BE MADE AVAILABLE TO BUILDING INSPECTORS. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fy = 240 PSI, E = 1,800 KSI. ALL CANTILEVERED OR CONTINUOUS BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2,400 PSI, FV = 240 PSI, E = 1,800 KSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS TO 5,000' RADIUS UNLESS SHOWN OTHERWISE ON THE PLANS. ALL GLUE LAMINATED COLUMNS SHALL BE DOUGLAS FIR COMBINATION 2, FC = 1,900 PSI, Fby = 1,800 PSI, Fbx = 1,700 PSI, E = 1,700 KSI (4 LAMS MINIMUM DEPTH).
- <u> 20. PARALLEL STRAND LUMBER (PSL) S</u>HALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL PARALLEL STRAND LUMBER SHALL BE MANUFACTURED USING DOUGLAS FIR STRANDS GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

Fb = 2900 PSI, E = 2.2×10^6 PSI, Fv = 290 PSI

Fb = 2400 PSI, E = 1.8×10^6 PSI, F'c = 2500 PSI (COMMERCIAL COLUMNS)

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

- 21. WOOD I-JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE I-JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE I.C.C. OR IAPMO UES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH WOOD JOIST PROVIDED. GLUE FLOOR JOISTS TO SHEATHING AS REQUIRED BY THE JOIST MANUFACTURER
- 22. PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH IBC SECTION 2303.4 AND ANSI/TPI I-2014 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION" FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. TRUSSES SHALL BE HANDLED, INSTALLED, AND BRACED PER "HIB 91" PER THE TRUSS PLATE INSTITUTE. LOADING SHALL BE AS FOLLOWS:

TOP CHORD SNOW LOAD TOP CHORD DL ALLOWANCE FOR PV PANELS 5 PSF TOP CHORD DEAD LOAD 5 PSF

BOTTOM CHORD LIVE LOAD IO PSF (NOT INCLUDED IN TOTAL) BOTTOM CHORD DEAD LOAD

<u>5 PSF</u> 40 PSF TOTAL LOAD

THE LOADS ABOVE SHALL BE INCREASED TO THE FOLLOWING IF THE TRUSSES MEET THE DESCRIPTION OF AN "UNINHABITABLE ATTIC WITH LIMITED STORAGE" AS DEFINED IN FOOTNOTE | OF IBC TABLE 1607.1:

BOTTOM CHORD LIVE LOAD 20 PSF - INCLUDE IN TOTAL

BOTTOM CHORD DEAD LOAD IO PSF

NET WIND UPLIFT (TOP CHORD)

SNOW LOAD DUE TO DRIFTING AND UNBALANCED LOADS SHALL BE INCLUDED PER THE IBC. TOP CHORDS SHALL BE DF LUMBER. UTILIZE A MINIMUM CREEP FACTOR OF 2.0 FOR DEAD AND SUSTAINED LIVE LOADS IN DETERMINING THE TRUSS DEFLECTIONS. MAXIMUM TOTAL DEFLECTION SHALL BE LESS THAN OR EQUAL TO L/240 OF THE TOTAL SPAN AND MAXIMUM LIVE LOAD DEFLECTION SHALL BE LESS THAN OR EQUAL TO L/360 OF THE TOTAL SPAN. PROVIDE ADEQUATE PLIES AND/OR METAL BRACKETS TO ADEQUATELY DISTRIBUTE THE BEARING PRESSURE AT THE ENDS OF THE GIRDER TRUSSES TO THE TOP PLATES OF THE BEARING WALLS SUCH THAT THE BEARING PRESSURE DOES NOT EXCEED 405 PSI. PROVIDE ADDITIONAL TRUSSES (AS REQUIRED) TO CARRY ALL CONCENTRATED LOADS AND MECHANICAL UNITS.

WOOD TRUSSES SHALL UTILIZE I.C.C. OR IAPMO UES APPROVED CONNECTOR PLATES. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BEAR THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

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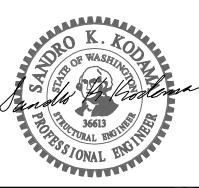
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GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

23. TRUSS SUPPLIERS NOTE: THE TRUSS CONFIGURATIONS, INCLUDING DEPTHS AND MEMBER SIZES SHOWN ON THE DRAWINGS, INDICATE THE DESIRED TRUSS CONFIGURATION AND ARE TO BE COMPLIED WITH WHEREVER POSSIBLE. IF A TRUSS MANUFACTURER IS UNABLE TO MEET THE LOAD REQUIREMENTS SPECIFIED WITH THE TRUSS CONFIGURATION INDICATED, THE MANUFACTURER IS TO SUBMIT WRITTEN NOTICE TO THAT EFFECT TO THE ARCHITECT PRIOR TO SUBMITTING A COST PROPOSAL OR BID.

IF A DIFFERENT SYSTEM IS PROPOSED THAT REQUIRES REVISIONS TO PRESENT STRUCTURAL FRAMING OR DETAILS, SUCH SYSTEM SHALL BE CONSIDERED SUBJECT TO THE APPROVAL OF THE OWNER, ARCHITECT, AND STRUCTURAL ENGINEER.

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND TRUSS MANUFACTURER TO VERIFY THE WEIGHT AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS. IT SHALL BE NOTED IN THE TRUSS MANUFACTURER'S BID WHETHER OR NOT AN ALLOWANCE HAS BEEN MADE FOR MECHANICAL UNITS.

TRUSS SHOP DRAWINGS WILL NOT BE REVIEWED WITHOUT CALCULATIONS BEARING THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER.

24. WOOD SHEATHING SHALL BE APA RATED, EXTERIOR GLUE; EXPOSURE I, IN CONFORMANCE WITH THE REQUIREMENTS FOR THEIR TYPE IN DOC PS-I OR PS-2. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS.

UNLESS OTHERWISE NOTED ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH (2) IOd-F NAILS AT EACH END, UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND NAIL WITH EDGE NAILING SPACED PER PLANS. WHERE NOT NOTED OTHERWISE, NAIL PANEL EDGES WITH 8d NAILS @ 6" O.C. EDGES, 12" O.C. IN THE FIELD.

- 25. ALL WOOD EXPOSED TO WEATHER, OR BEARING ON UNPROTECTED CONCRETE BELOW GRADE, OR BEARING ON UNPROTECTED CONCRETE LESS THAN 8" FROM EXPOSED EARTH SHALL BE PRESSURE-TREATED, U.O.N. PRESSURE TREATMENT SHALL BE WITH AN APPROVED PRESERVATIVE AND BRANDED WITH A QUALITY CONTROL AGENCY MARK BY THE AMERICAN MOOD PRESERVERS BUREAU OR EQUAL. ALL METAL HARDWARE IN CONTACT WITH TREATED MOOD SHALL BE PROTECTED WITH A GI85 GALVANIZED COATING (ZMAX) OR BETTER. ALL NAILS IN TREATED MOOD SHALL BE HOT-DIP GALVANIZED OR BETTER. PROVIDE 2 LAYERS OF 30# ASPHALT IMPREGNATED BUILDING PAPER BETWEEN NON-PRESSURE-TREATED LEDGERS, BLOCKING, ETC., AND CONCRETE.
- 26. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE I.C.C. OR IAPMO UES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE MASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON MOOD. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED. ALL BOLTS TIGHTENED TO SNUG TIGHT.

27. WOOD FASTENERS:

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

DRAWING ID	NAIL NAME	NAIL DIAMETER	NAIL LENGT
"6d"	6d Common	0.113"	2"
"8d Вох"	8d Box	0.113"	2-1/2"
"8d"	8d Common	0.131"	2-1/2"
"lOd-F"	10d Framer	0.131"	3"
"lOd"	10d Shear	0.148"	2-1/4"
"l6d"	16d Sinker	0.148"	3-1/4"

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

- B. NAILS SHEATHING FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.
- C. SCREWS SHALL BE WOOD SCREWS OF THE DIAMETER AND LENGTH NOTED ON THE DRAWINGS. SDS FASTENERS ARE SIMPSON STRONG DRIVE SCREWS.
- D. HOT DIPPED GALVANIZED NAILS, BOLTS AND METAL PLATES ALL NAILS, BOLTS AND METAL PLATES IN CONTACT WITH PRESSURE TREATED (INCLUDING FIRE-RETARDANT TREATED) LUMBER SHALL BE HOT DIPPED GALVANIZED.

- 28. WOOD FRAMING NOTES: THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:
- A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE IBC. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. TIGHTEN BOLTS AND LAG SCREWS SNUGLY AGAINST WOOD FRAMING AFTER WOOD HAS REACHED SPECIFIED MOISTURE CONTENT.
- B. WALL FRAMING: ALL BEARING AND SHEAR WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2 x 4 STUDS @ 16" O.C. AT INTERIOR WALLS AND 2 x 6 @ 16" O.C. AT EXTERIOR WALLS. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL BEARING AND SHEAR WALLS AND AT EACH SIDE OF ALL OPENINGS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW.
- ALL BEARING STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 8" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS WITH 3"x3"x1/4" PLATE WASHERS @ 4'-0" O.C., UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH IOd-F NAILS @ 8" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES AND GYPSUM SHEATHING ON EXTERIOR SURFACES ATTACHED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH SCREWS AT 8" O.C. USE 1-1/4 " W #6 SCREWS FOR 1/2" GWB AND 5/8" GWB WHERE OCCURS. USE 1-1/4" W #6 GALVANIZED SCREWS FOR 1/2" GWB AND 5/8" EXTERIOR GYPSUM SHEATHING. WHERE OCCURS. VERIFY THE FIRE ASSEMBLY REQUIREMENTS WHERE APPLICABLE WITH THE ARCHITECT.
- C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH IOD-F NAILS @ 8" O.C. STAGGERED UNLESS OTHERWISE NOTED.
- D. <u>POSITIVE CONNECTIONS</u>: PROVIDE THE FOLLOWING SIMPSON CONNECTORS AT TYPICAL FRAMING UNLESS OTHERWISE NOTED ON PLAN OR DETAIL. PROVIDE CCQ/ECCQ CAPS AND PBS BASES AT POSTS. PROVIDE BC BASE WHERE POST BEARS ON WOOD FRAMING BELOW. PROVIDE LUS SERIES HANGERS FOR 2X FLOOR AND ROOF JOISTS. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED

Angle	L	ABBRE\	 @
Pound	LB.	Penny (Nails)	d
Live Load	LL	Diameter	Þ
Long Leg Horizonta	LLH	Degrees	0
Long Leg Vertica	LLV	Pounds	#
Longitudina	LONGIT.	Number	#
Lightweight	LT. MT.	A la avea	Δ)
Maximun	MAX.	Above Anchor Bolt	A) \.B.
Mechanica Mechanica	MECH.	Additional	ADD'L
Mezzanine	MEZZ.	Alternate	ALT.
Moment Frame	MF		YPPROX
Manufacture	MFR.	Architect	ARCH.
Minimur	MIN.	, , , , , , , , , , , , , , , , , , , ,	
Miscellaneou	MISC.	Below	B)
Mark	MK.	Bottom of	-, 3/
		Braced Frame	3F
New	(N)	Blocking	BLKG.
Nort	N.	Building	BLDG.
Near Side	N.S.	Beam	BM.
Nomina	NOM.	Bottom	30T.
Not to Scale	NTS	Bearing	BRG.
		Between	BTMN.
On Center	0.0.		_
Outside Diameter	O.D.	Centerline	<u>{</u>
Outside Face	0.F.	Camber	
Overhand	0.H.	Cast In Place	
Opening	OPNG.	Construction Joint or Control Joint	5.J.
Opposite	OPP.	Complete Joint Penetration	
Danidaa Aakiiakaa Parisi	₽∧⊏	Ceiling	LG.
Powder Actuated Fastene	PAF	Clear	LR. .mu
Precas Permanen	PC PERM	Concrete Masonry Unit	CMU COL
Permanen Perpendicula	PERM. PERP.	Column Concrete	COL. CONC.
Perpendicula Partial Joint Penetratio	PJP	Concrete Connections	CONN.
Partial Joint Menetration	PL or P	Construction	CONST.
Pounds per linear Foo	PLF	Continuous	CONT.
Plymood	PLYWD	Continuous	SK.
Prefabricated	PREFAB.	COULDING	. J. 41
Pounds per Square Foo	PSF	Deformed Bar Anchor)BA
Pounds per Square Inc	PSI	Double	BL.
Post-Tensioning	P.T. or PT	Degree	DEG.
Pressure-Treated	P/T	Doug Fir-Larch	OF.
		Diameter	NA.
Radius	RAD.	Diagonal	DIAG.
Reference	REF.	Diaphragm	DIAPH.
Reinforce or Reinforcemen	REINF.	Dimension	DIM.
Required	REQD.	Down	DN.
Revise	REV.	Ditto	20
Rough Opening	R.O.	Detail	OTL.
Sout	S.	Drawing	DMG.
	SCH. or SCHI	Existing	E)
Section	SECT.	East	_, =.
Shee	SHT.	Each	ĒA.
Simila	SIM.	Each Face	E.F.
Slab On Grade	50G	Elevation	<u>-</u> L.
Specificatio	SPEC.	Elevator	ELEV.
Square	SQ.	Embedment Length	MBED.
Square Fee	SQ. FT.	Engineer	ENGR.
Square Inch(es	SQ. IN.	- Equal	Q.
Spruce-Pine-Fi	SPF	Each May	E.M.
Stainless Stee	S.S.	Expansion	XP.
Standard	STD.	Exterior	EXT.
Stiffene	STIFF.		
Stee	STL.	Foundation	DN.
Structure	STR.	Finish	IN.
Substitute	SUB.	Floor	ELR.
Symmetrica	SYM.	Fiber Reinforced Polymer	RP
_	T /	Far Side	=.S. =⊤
Top o	T/ T# B	Foot or Feet	=T. =T.G
Top and Bottor	T&B T&G	Footing	TG.
TAMES A Free	T\$6	Carra	5.A
_	TEME	Galyanized	5A. 5ALV
Temporar	TEMP. Turi	Galvanized Glue Laminated	SALV.
Temporar Throug	THRU	THUE I OMINOTEO	- L
Temporar Throug Top of Concrete	THRU T.O.C.		WP.
Temporar Throug Top of Concret Top of Stee	THRU T.O.C. T.O.S.	Gypsum Wall Board	SMB
Temporar Throug Top of Concrete Top of Stee Top of Wa	THRU T.O.C. T.O.S. T.O.W.	Gypsum Wall Board	
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse	THRU T.O.C. T.O.S. T.O.W. TRANS.	Gypsum Wall Board Hot Dipped Galvanized	I DG
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee	THRU T.O.C. T.O.S. T.O.W. TRANS. TS	Gypsum Wall Board Hot Dipped Galvanized Header	IDG IDR.
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee	THRU T.O.C. T.O.S. T.O.W. TRANS.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir	IDG IDR. IF
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typico	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger	IDG IDR. IF IGR.
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typico	THRU T.O.C. T.O.S. T.O.W. TRANS. TS	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal	IDG IDR. IF IGR. IORIZ.
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typico	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section	HDG HDR. HF HGR. HORIZ. HSS
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typico Unless Otherwise Notes	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal	HDG HDR. HF HGR. HORIZ. HSS
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typico Unless Otherwise Noted	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section	HDG HDR. HGR. HGRIZ. HGS HT.
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typico Unless Otherwise Notes Vertica Verify in Field	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height	IDG IDR. IF IGR. IORIZ. ISS IT.
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typica Unless Otherwise Note Vertica Verify in Field	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter	IDG IDR. IF IGR. IGS IT. D. .F.
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typica Unless Otherwise Notes Vertica Verify in Field	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF W.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter Inside Face	IDG IDR. IF IGR. IORIZ. ISS IT. D. .F. N.
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typica Unless Otherwise Note Vertica Verify in Field Wes Wit Welded Headed Stu	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF W. W. or w/	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter Inside Face	1DG 1DR. 1F 1GR. 1GS 1T D. F. NFO.
Temporar Throug Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typica Unless Otherwise Notea Vertica Verify in Field Mes Withou	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF W. W. or w/ W.H.S.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter Inside Face Inch	1DG 1DR. 1F 1GR. 1GS 1T D. F. NFO.
Tongue & Groove Temporari Through Top of Concrete Top of Stee Top of Wai Transverse Tube Stee Typica Unless Otherwise Noted Vertica Verify in Field Wes With Welded Headed Stud Withou Work Poin Welded Threaded Stud	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF W. W. or w/ W.H.S. W/O	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter Inside Face Inch	5WB 1DR 16RZ 15RX 15. N.F. N.F. N. T.
Temporar Through Top of Concrete Top of Stee Top of Ma Transverse Tube Stee Typica Unless Otherwise Noted Vertica Verify in Field Mes Mithou Mork Poin Melded Threaded Stud	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF W. W.Or w/ W.H.S. WO WP	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter Inside Face Inch Information Interior Joint	1DG R. 1Z. 15 P. F. N. FT. N. T. N. T. N. T.
Temporari Through Top of Concrete Top of Stee Top of Ma Transverse Tube Stee Typica Unless Otherwise Noted Vertica Verify in Field Wes Mith Welded Headed Stud Withou Work Poin Welded Wire Fabric	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF W. or w/ W.H.S. W/O WP W.T.S. WWF	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter Inside Face Inch Information Interior Joint Kips	DG # 16 PS 17 D. F. N. FO. NT
Temporari Through Top of Concrete Top of Stee Top of Wai Transverse Tube Stee Typica Unless Otherwise Noted Vertica Verify in Field Westee With Welded Headed Stud Withou Work Poin Welded Wire Fabric Cross Section	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF W. W/O W.H.S. W/O WP W.T.S. WWF X SECT.	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter Inside Face Inch Information Interior Joint Kips Kips per Square Foot	1DG 1F 1608 1T D.F. N.FO. NT
Temporar Through Top of Concrete Top of Stee Top of Wa Transverse Tube Stee Typica Unless Otherwise Noted Vertica Verify in Field Wes Withou Work Poin Welded Threaded Stud Welded Wire Fabric	THRU T.O.C. T.O.S. T.O.W. TRANS. TS TYP. U.O.N. VERT. VIF W. or w/ W.H.S. W/O WP W.T.S. WWF	Gypsum Wall Board Hot Dipped Galvanized Header Hem Fir Hanger Horizontal Hollow Structural Section Height Inside Diameter Inside Face Inch Information Interior Joint Kips	1DG 1DR. 1F 1GRIZ. 1GS 1T D. F. N. FO. NT.

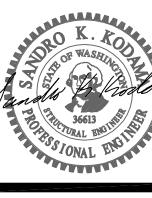
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(E) WALL (E) SLAB, VIF (E) WALL -SEE S2.1 FOR FOUNDATION PLAN OF NEW WALL ABOVE, TYP. — — (E) WALL

BASEMENT FOUNDATION PLAN NOTES:

- 2. SEE SHEETS SI.O AND SI.I FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEET S3.0 FOR TYPICAL CONCRETE AND FOUNDATION DETAILS. SEE SHEET S4.0 FOR TYPICAL WOOD DETAILS.
- O.C. EACH WAY AT MID-DEPTH, U.O.N. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SUB-GRADE MOISTURE BARRIER AND ELEVATIONS, ETC.
- 4. FOR SLAB-ON-GRADE JOINTS, SEE DETAIL 2/S3.O.
- OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED, U.O.N.
- AND SLABS, SEE DETAIL 1/S4.0.
- 9. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).

<u>LEGEND</u>:

- INDICATES FOOTING

INDICATES FOUNDATION WALL, WOOD BEARING WALL OR SHEAR WALL

SHEAR WALL AT THIS LEVEL. SEE PLAN NOTES 6 \$ 8

WALL AT THIS LEVEL. SEE | \$ 2/54.| FOR CONNECTION DETAILS

- ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
- 3. SLAB-ON-GRADE SHALL BE 4" THICK CONCRETE REINFORCED WITH #4 @ 16"
- 5. WHERE NEW CONCRETE IS CAST AGAINST EXISTING CONCRETE FOUNDATIONS, DRILL AND EPOXY #4 DOWELS x 3'-0" LONG TO LAP WITH THE NEW FOOTING LONGITUDINAL REINFORCING (5" MINIMUM EMBEDMENT).
- 6. ALL WOOD BEARING ON UNPROTECTED CONCRETE, EXPOSED TO WEATHER,
- 7. FOR SILL PLATE ANCHOR BOLT LAYOUT TO CONCRETE FOUNDATION WALLS
- 8. ALL BEARING AND SHEAR WALLS SHALL BE 2x4 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.

INDICATES SPREAD FOOTING. SEE 12/53.0 FOR SCHEDULE

INDICATES WOOD BEARING OR

INDICATES NON-BEARING/ NON-SHEAR

BASEMENT FOUNDATION PLAN SCALE: 1/8" = 1'-0"

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QCE PROJ. #: 21271.01 DRAWN BY: SC P.M./P.E.: SKK/TCN



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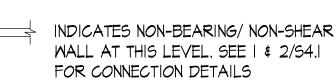
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- ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND
- 2. SEE SHEETS SI.O AND SI.I FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEET S3.0 FOR TYPICAL CONCRETE AND FOUNDATION
- 3. SLAB-ON-GRADE SHALL BE 4" THICK CONCRETE REINFORCED WITH #4 @ 16" O.C. EACH WAY AT MID-DEPTH, U.O.N. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SUB-GRADE MOISTURE BARRIER AND
- 5. WHERE NEW CONCRETE IS CAST AGAINST EXISTING CONCRETE FOUNDATIONS, DRILL AND EPOXY #4 DOWELS x 3'-0" LONG TO LAP WITH THE NEW FOOTING
- 6. ALL WOOD BEARING ON UNPROTECTED CONCRETE, EXPOSED TO WEATHER, OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED, U.O.N.
- 7. FOR SILL PLATE ANCHOR BOLT LAYOUT TO CONCRETE FOUNDATION WALLS AND
- 8. TYPICAL FLOOR FRAMING CONSISTS OF 1-1/8" APA RATED T&G SHEATHING (INDEX 48/24), LAID FACE GRAIN PERPENDICULAR OVER JOISTS AT 16" O.C. HANG TJI JOISTS WITH ITS TOP FLANGE HANGERS AND GLULAM WITH BA TOP
- 9. NAIL FLOOR SHEATHING TO FRAMING WITH 8d NAILS (0.131" ϕ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE
- 10. ALL BEARING AND SHEAR WALLS SHALL BE 2x4 @ 16" O.C. INTERIOR AND 2x6 @
- POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR
- BEAMS AND ALL POSTS ABOVE FOR FULL BEARING. PROVIDE BLKG. AT JOISTS
- 13. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x10 FOR EXTERIOR BEARING WALLS AND (2) 2x10 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER
- 15. ALIGN A JOIST OR JOIST BLOCKING OVER THE FULL LENGTH OF ALL BEARING/SHEAR WALLS. SEE 8/S4.0 FOR SPECIAL SHEAR WALL BLOCKING
- INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE
- INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/S4.0 FOR HOLDOWN DETAIL.



PLAN NOTES 10 \$ 16

\===\Rightarrow INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW



↓ — ↓ INDICATES HEADER MEMBER. SEE PLAN NOTE 13

> INDICATES MULTIPLE STUD POST AT THIS LEVEL. SEE PLAN NOTE 12

INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTE 17

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SECOND LEVEL / LOWER ROOF FRAMING PLAN NOTES:

- ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
- 2. SEE SHEETS SI.O AND SI.I FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.2 FOR TYPICAL WOOD DETAILS.
- 3. TYPICAL ROOF FRAMING CONSISTS OF 15/32" APA RATED SHEATHING (INDEX 32/16), LAID FACE GRAIN PERPENDICULAR OVER PRE-FABRICATED ROOF TRUSSES AND 2x FRAMING @ 24" O.C., U.O.N. (SEE THE STRUCTURAL GENERAL NOTES FOR TRUSS DESIGN CRITERIA).
- 4. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS (0.131" $\phi \times 2.5$ " LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
- 5. PROVIDE SOLID BLOCKING BETWEEN EACH ROOF JOIST OR TRUSS AT SUPPORTS. PROVIDE AN HI CLIP AT EVERY MEMBER TO TOP PLATE.
- 6. ATTACH NON-BEARING INTERIOR WALLS TO BOTTOM OF TRUSSES WITH STC CLIPS AT 48" O.C. INSTALL IN ACCORDANCE WITH MFR. RECOMMENDATIONS. SEE DETAIL 9/54.4.
- 7. TYPICAL FLOOR FRAMING CONSISTS OF 1-1/8" APA RATED T&G SHEATHING (INDEX 48/24), LAID FACE GRAIN PERPENDICULAR OVER 16" TJI 210 JOISTS AT 16" O.C. HANG TJI JOISTS WITH ITS TOP FLANGE HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
- 8. NAIL FLOOR SHEATHING TO FRAMING WITH 8d NAILS (0.131" ϕ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/54.0.
- 9. ALL BEARING AND SHEAR WALLS SHALL BE 2x4 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
- 10. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
- PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL FLOOR BEAMS AND ALL POSTS ABOVE FOR FULL BEARING. PROVIDE BLKG. AT JOISTS PER DETAIL 7/S4.I.
- 12. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x10 FOR EXTERIOR BEARING WALLS AND (2) 2x10 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
- 13. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1
- 14. ALIGN A JOIST OR JOIST BLOCKING OVER THE FULL LENGTH OF ALL BEARING/SHEAR WALLS. SEE 8/S4.0 FOR SPECIAL SHEAR WALL BLOCKING REQUIREMENTS.
- INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE SHEATHED PER SM-6 CRITERIA, U.O.N.
- INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/54.0 FOR HOLDOWN DETAIL. USE MIN. (2) 2x POST U.O.N.
- 17. CSxx/CMxx INDICATES HOLDOWN STRAP TO FRAMING BELOW WALL. SEE 10/S4.0 FOR STRAP HOLDOWN DETAIL AT FLOOR-TO-FLOOR AND BEAM SUPPORTING SHEAR WALL END. USE MIN. (2) 2x POST U.O.N.

KEY NOTES:

STRAPPING AROUND SHEAR WALL OPENING PER 1/54.3

<u>LEGEND</u>:

/ INDICATES FRAMING DIRECTION - INDICATES EXTENT OF FRAMING

INDICATES SHEAR WALL TYPE AT THIS LEVEL. SEE PLAN NOTE 15



INDICATES WOOD BEARING OR SHEAR WALL AT THIS LEVEL. SEE PLAN NOTES 9 \$ 15

\$==\$ INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW

INDICATES NON-BEARING/ NON-SHEAR WALL AT THIS LEVEL. SEE | \$ 2/54.| FOR CONNECTION DETAILS

INDICATES HEADER MEMBER. SEE PLAN NOTE 13



INDICATES MULTIPLE STUD POST AT THIS LEVEL. SEE PLAN NOTE 12



INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTES 16 \$ 17

INDICATES ROOF OVERFRAMING PER DETAIL 4/S4.4

SECOND LEVEL / LOWER ROOF FRAMING PLAN SCALE: 1/8" = 1'-0"

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1511 THIRD AVENUE SUITE 323 TEL 206.957.3900 **QUANTUM** FAX 206.957.3901 CONSULTING ENGINEERS WWW.QUANTLIMCE.COM QCE PROJ. #: 21271.01 DRAWN BY: SC P.M./P.E.: SKK/TCN



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ROOF FRAMING PLAN NOTES:

- ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
- 2. SEE SHEETS SI.O AND SI.I FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.3 FOR TYPICAL WOOD DETAILS.
- 3. TYPICAL ROOF FRAMING CONSISTS OF 15/32" APA RATED SHEATHING (INDEX 32/16), LAID FACE GRAIN PERPENDICULAR OVER PRE-FABRICATED ROOF TRUSSES AND 2x FRAMING @ 24" O.C., U.O.N. (SEE THE STRUCTURAL GENERAL NOTES FOR TRUSS DESIGN CRITERIA).
- 4. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
- 5. PROVIDE SOLID BLOCKING BETWEEN EACH ROOF JOIST OR TRUSS AT SUPPORTS. PROVIDE AN HI CLIP AT EVERY MEMBER TO TOP PLATE.
- 6. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x10 FOR EXTERIOR BEARING WALLS AND (2) 2x10 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
- 7. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL ROOF BEAMS FOR FULL BEARING.
- 8. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.I.
- 9. ATTACH NON-BEARING INTERIOR WALLS TO BOTTOM OF TRUSSES WITH STC CLIPS AT 48" O.C. INSTALL IN ACCORDANCE WITH MFR. RECOMMENDATIONS. SEE DETAIL 9/54.4.
- 10. PROVIDE 5 PSF OF ALLOWANCE FOR SOLAR PANEL ON THE ROOF TRUSSES.

LEGEND:

/ INDICATES FRAMING DIRECTION - INDICATES EXTENT OF FRAMING

| INDICATES WOOD BEARING | WALL OR SHEAR WALL BELOW

INDICATES ROOF OVERFRAMING PER DETAIL 4/S4.4 INDICATES HEADER MEMBER. SEE PLAN NOTE 6



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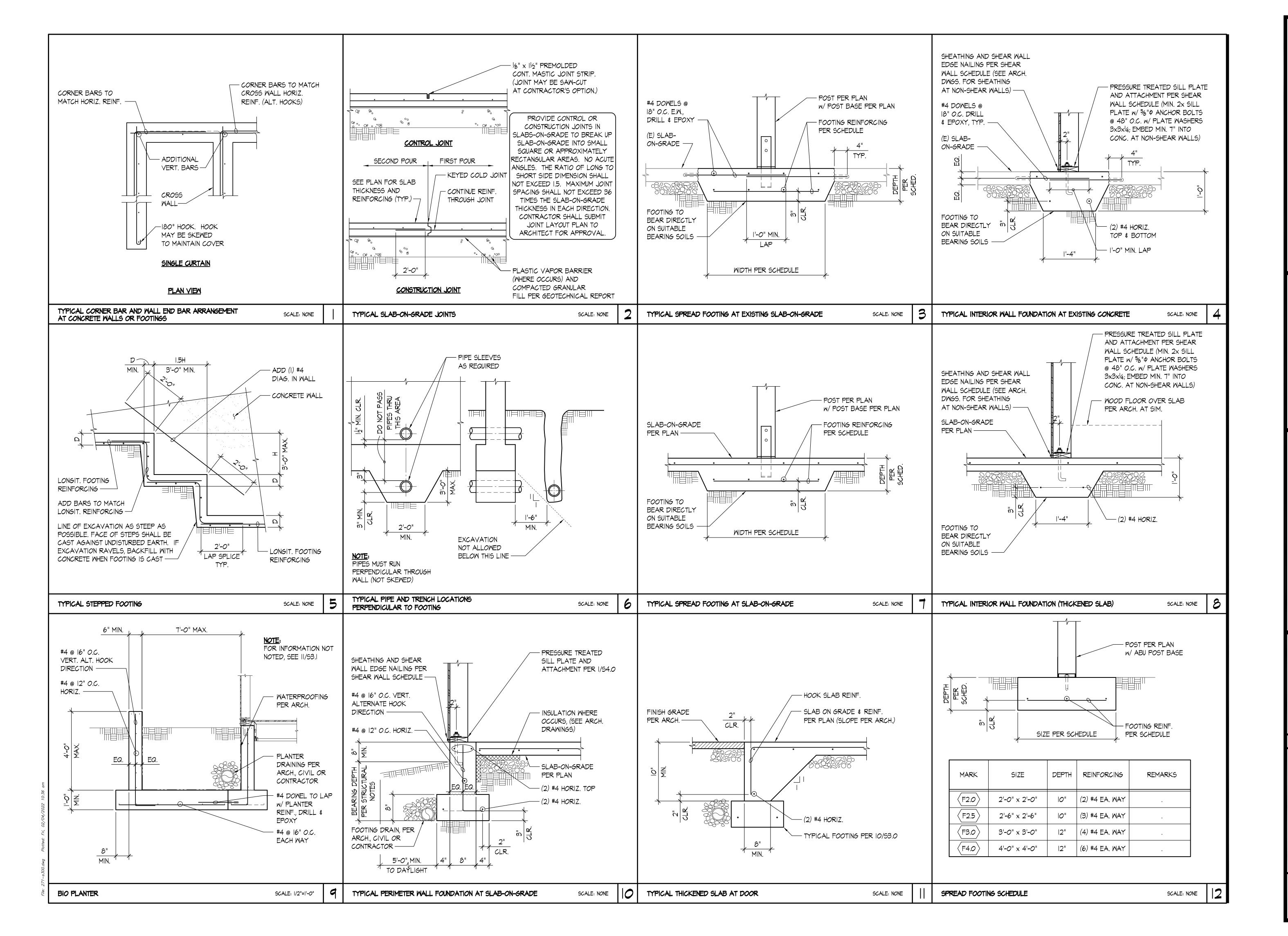
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ROOF FRAMING PLAN SCALE: 1/8" = 1'-0"



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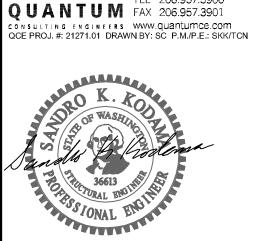
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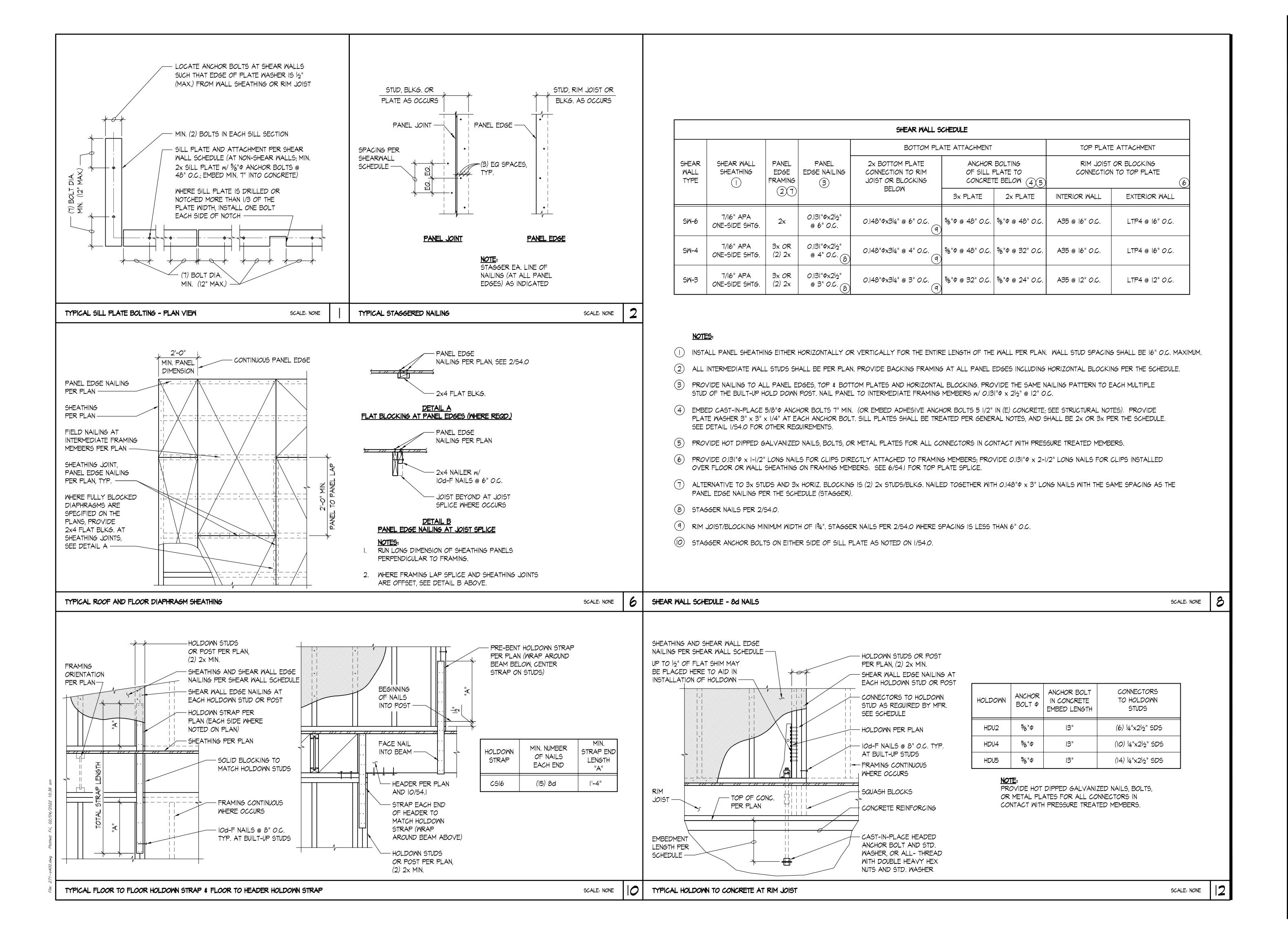
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11773 Sunrise Drive NE, BainBridge Island, Wash telephone: 425.444.6782

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FAX 206.957.3901
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HEADRICK RESIDENCE

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MERCER ISLAND, WA. 98040

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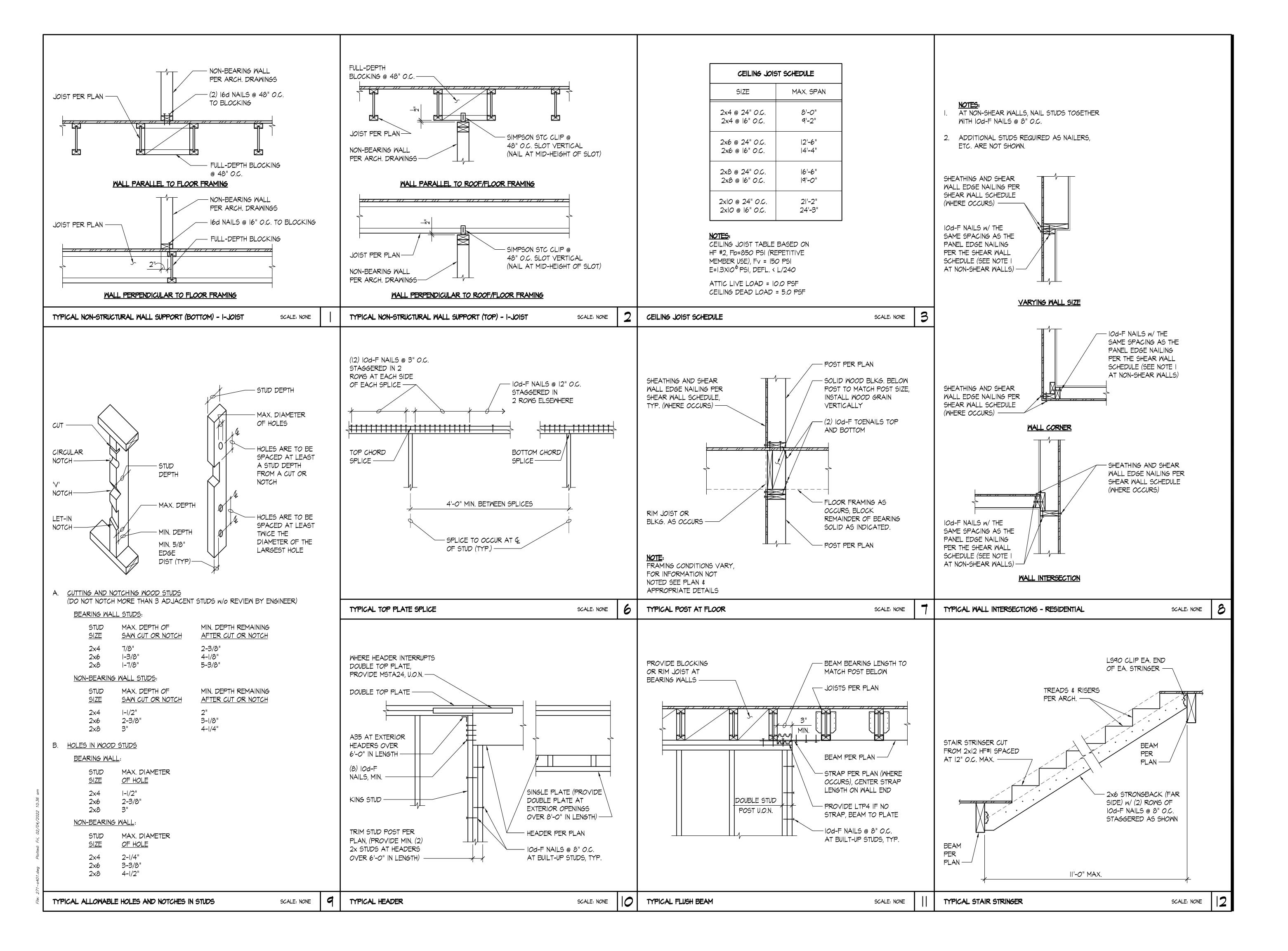
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TYPICAL WOOD DETAIL

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11773 Sunrise Driv BainBridge Island, telephone: 425.444.67

1511 THIRD AVENUE
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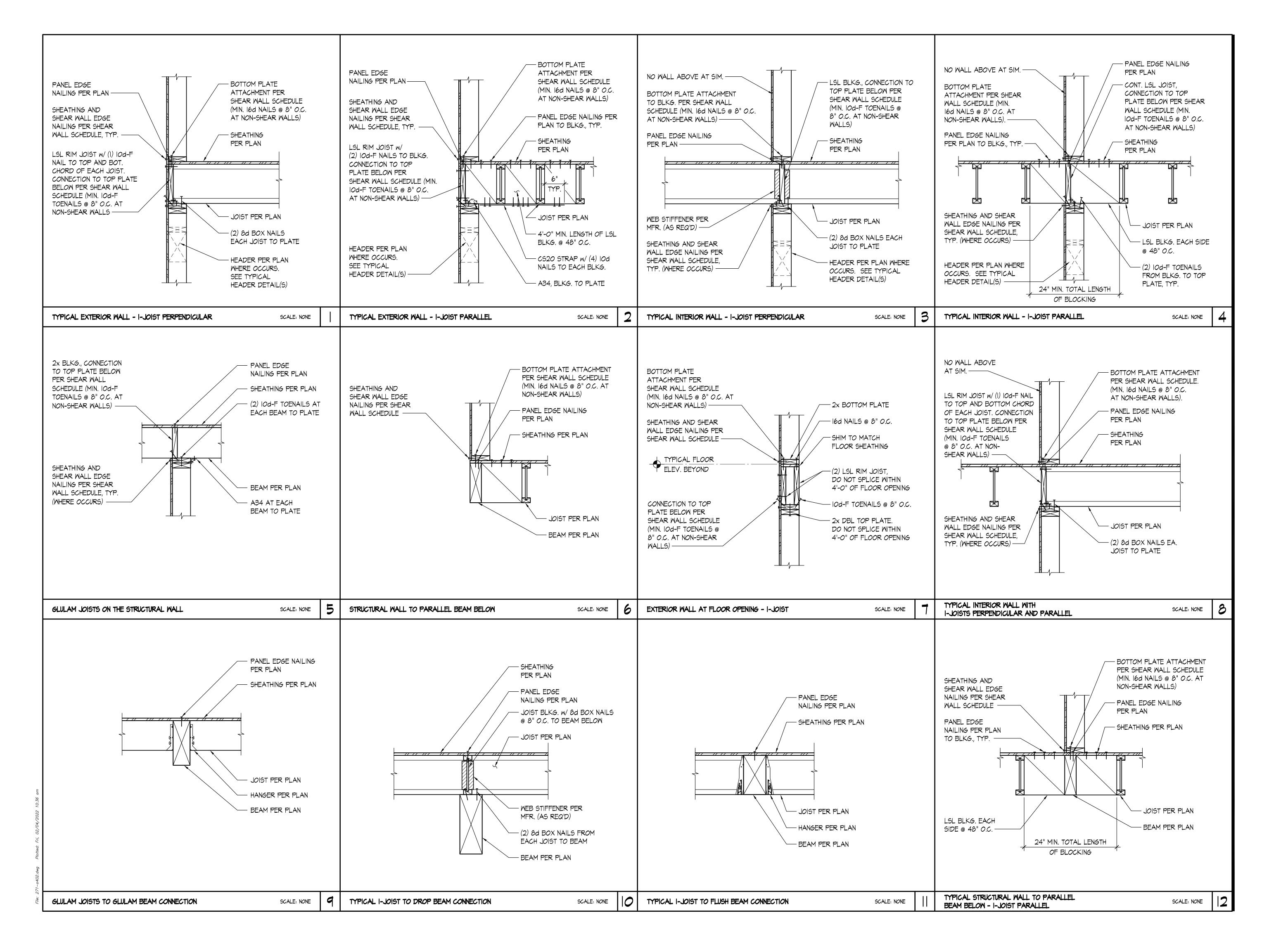


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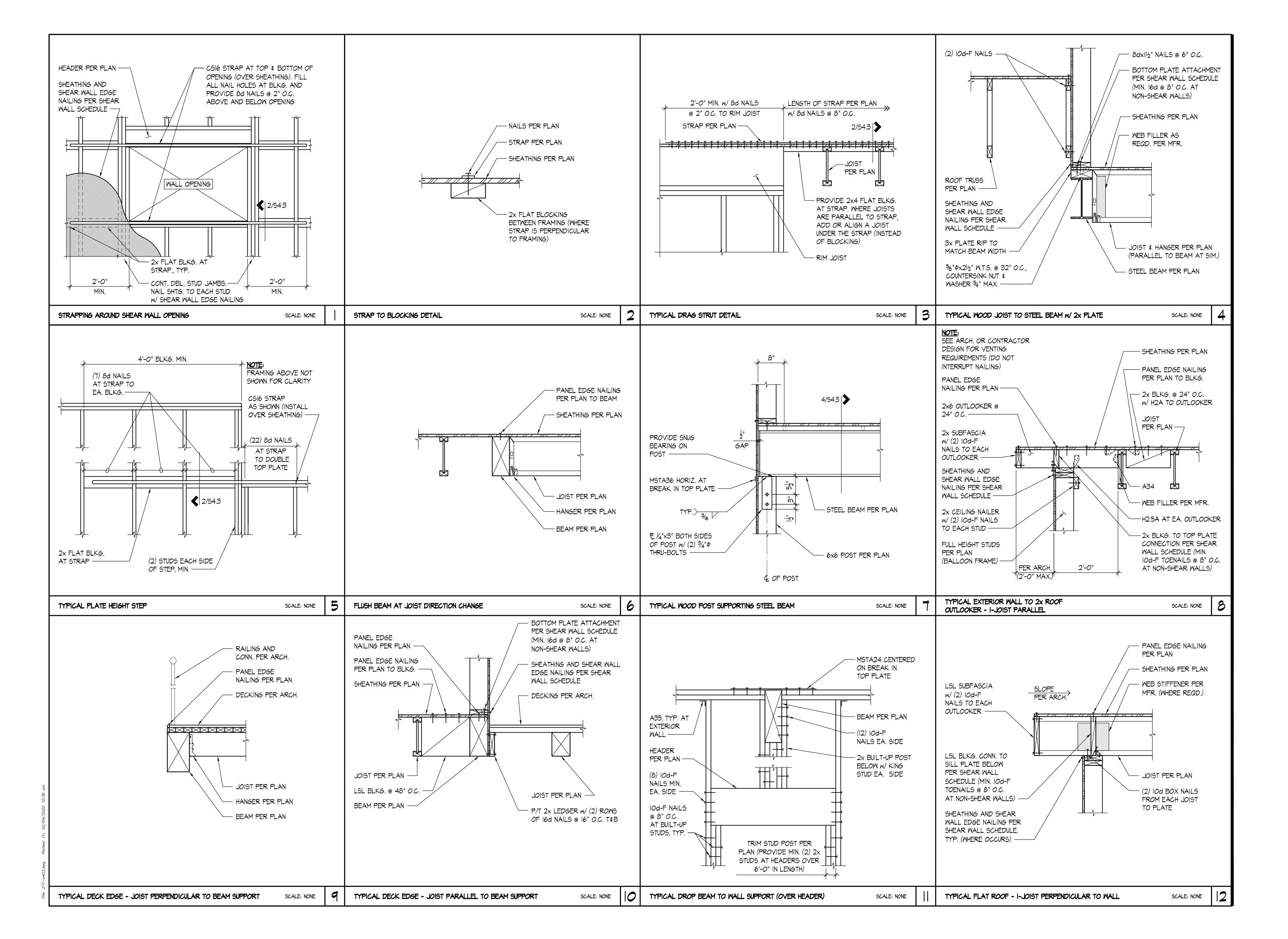
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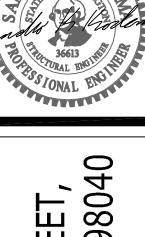
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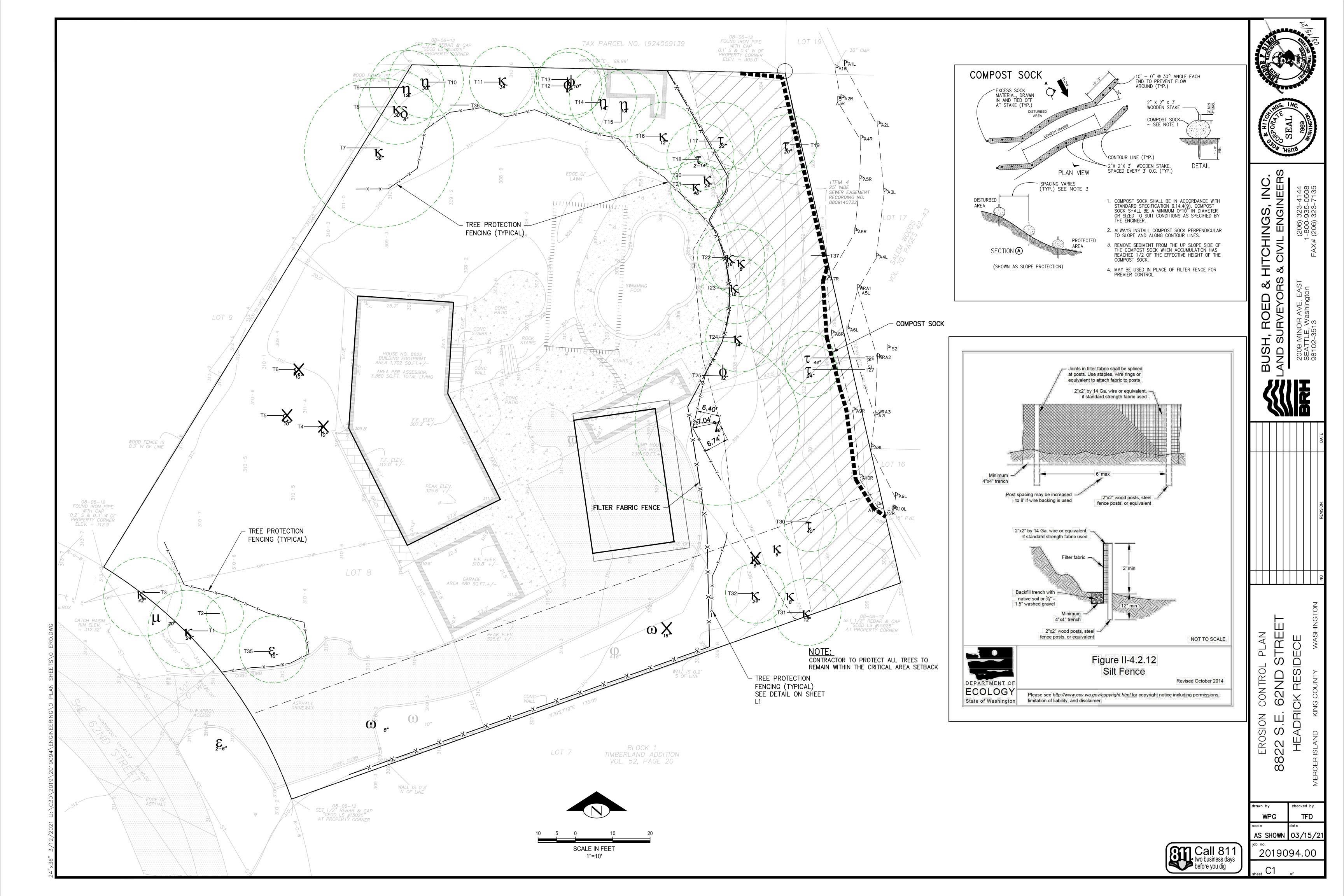
irise Drive NE, Island, Washington 25.444.6782 **Inelson**@msn.com 11773 Sunri BainBridge | telephone: 428

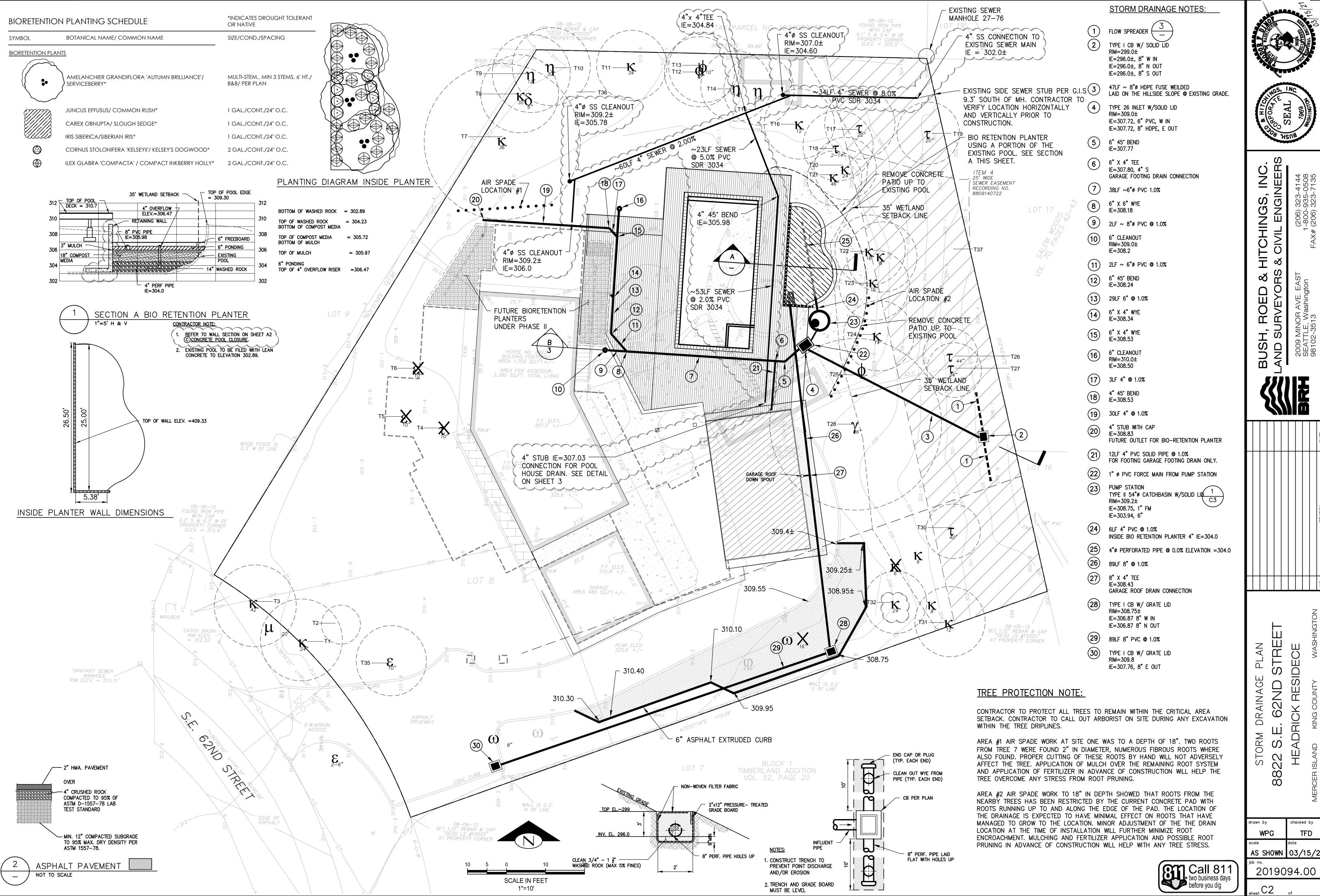
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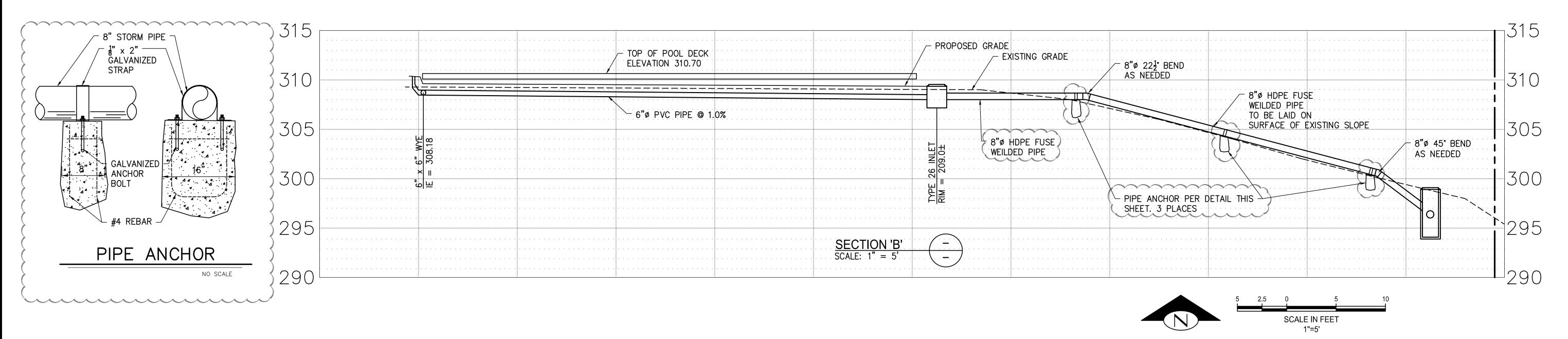
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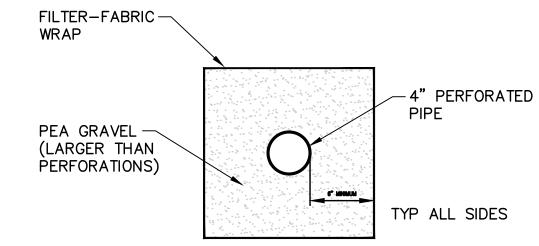
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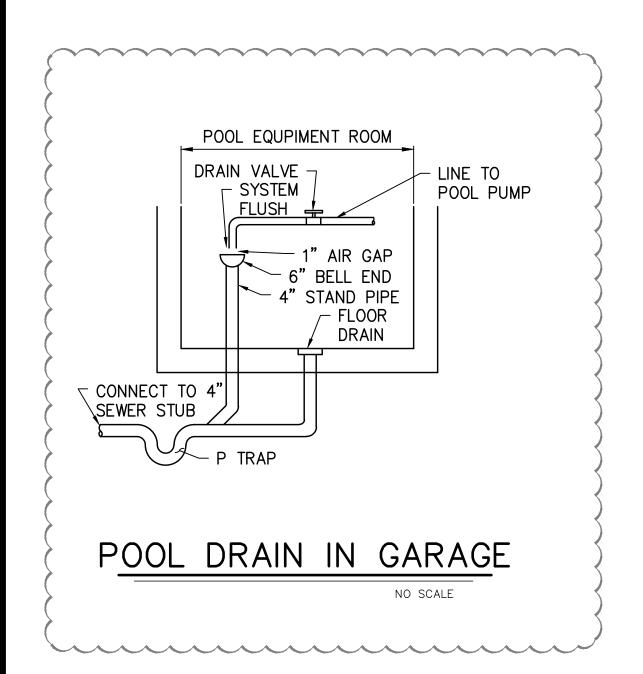


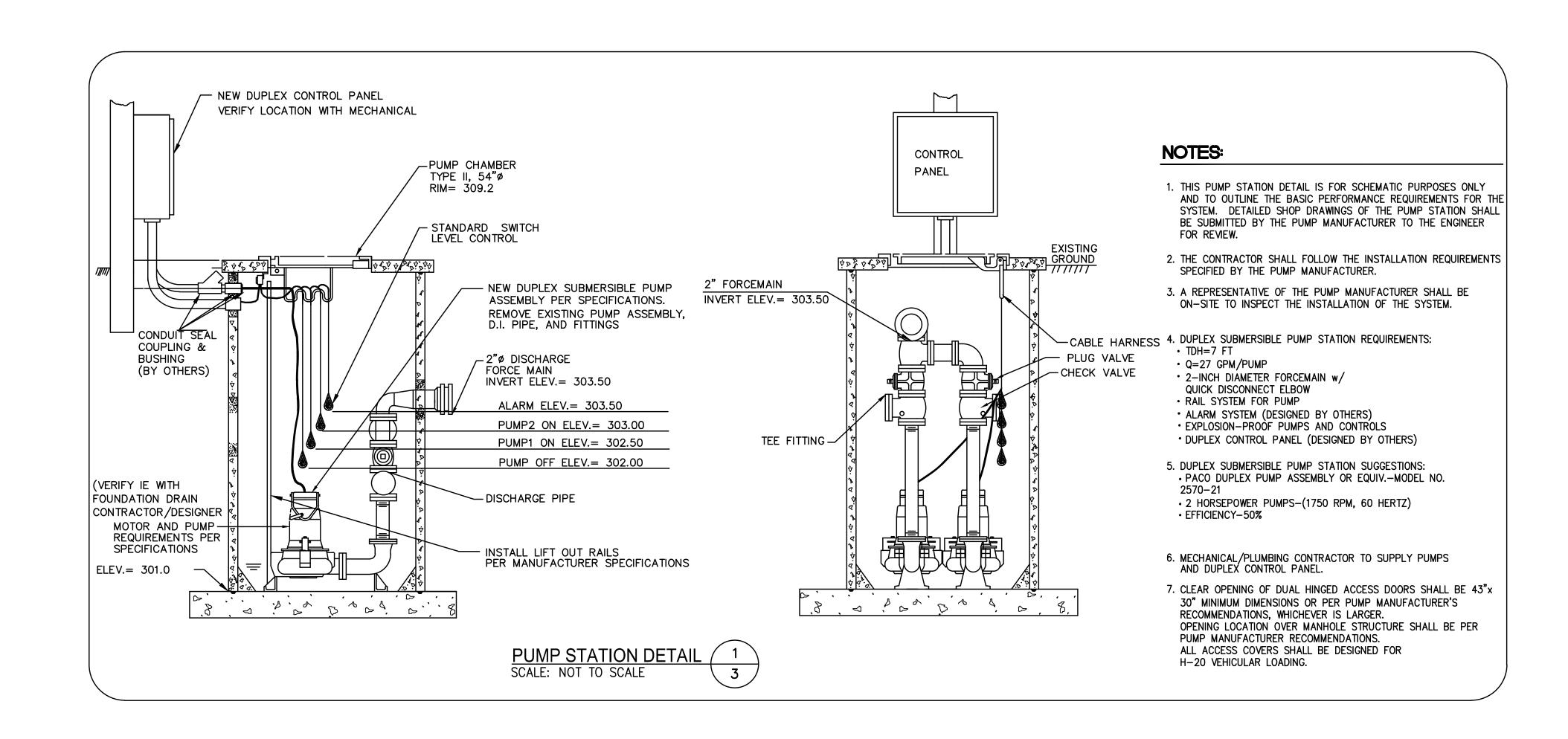






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DETAILS STRE AINAGE DR. STORM

checked by AS SHOWN 03/15/21 2019094.00

Call 811 two business days before you dig

EXISTING TREES

TREE #	Т	REE TYPE	DBH	DRIPLINE	RETAIN OR REMOVE
1.	WESTERN RED CEDAR	THUJA PLICATA	19" DBH	20' DL	RETAIN
2.	MOUNTAIN ASH	SORBUS AMERICANA	6" DBH	10' DL	RETAIN
3.	WESTERN RED CEDAR	THUJA PLICATA	48" DBH	21'DL	RETAIN
4.	JAPANESE MAPLE	ACER PALMATUM	9" DBH	15' DL	RETAIN
5.	PACIFIC DOGWOOD	CORNUS NUTTALLII	7" DBH	15' DL	RETAIN
6.	MAGNOLIA	MAGNOLIA GRANDIFLORA	12" DBH	15' DL	RETAIN
7.	WESTERN RED CEDAR	THUJA PLICATA	33" DBH	20' DL	RETAIN
8.	WESTERN RED CEDAR	THUJA PLICATA	25" DBH	20' DL	RETAIN
9.	DOUGLAS FIR	PSEDUO-TSUGA MENZIESII	20" DBH	20' DL	RETAIN
10.	DOUGLAS FIR	PSEDUO-TSUGA MENZIESII	22" DBH	20' DL	RETAIN
11.	WESTERN RED CEDAR	THUJA PLICATA	33" DBH	18' DL	RETAIN
12.	HEMLOCK	TSUGA HETEROPHYLLA	15" DBH	18' DL	RETAIN
13.	HEMLOCK	TSUGA HETEROPHYLLA	15" DBH	18' DL	RETAIN
14.	HEMLOCK	TSUGA HETEROPHYLLA	14" DBH	15' DL	RETAIN
15.	HEMLOCK	TSUGA HETEROPHYLLA	12" DBH	12' DL	RETAIN
16.	WESTERN RED CEDAR	THUJA PLICATA	12" DBH	12' DL	RETAIN
17.	BIG LEAF MAPLE	ACER MACROPHYLLUM	28" DBH	25' DL	RETAIN
18.	BIG LEAF MAPLE	ACER MACROPHYLLUM	28" DBH	25' DL	RETAIN
19.	BIG LEAF MAPLE	ACER MACROPHYLLUM	27" DBH	20' DL	RETAIN
20.	WESTERN RED CEDAR	THUJA PLICATA	28" DBH	20' DL	RETAIN
21.	WESTERN RED CEDAR	THUJA PLICATA	57" DBH	24' DL	RETAIN
22.	WESTERN RED CEDAR	THUJA PLICATA	20" DBH	18' DL	RETAIN
23.	WESTERN RED CEDAR	THUJA PLICATA	18" DBH	20' DL	RETAIN
24.	WESTERN RED CEDAR	THUJA PLICATA	17" DBH	18' DL	RETAIN
25.	HEMLOCK	TSUGA HETEROPHYLLA	11" DBH	14' DL	RETAIN
26.	STUMP SPROUT				RETAIN
27.	STUMP SPROUT				RETAIN
28.	SPRUCE,	PICEA MARIANA	39" DBH	22' DL	RETAIN
29.	PREVIOUSLY REMOVED				N/A
30.	BIG LEAF MAPLE	ACER MACROPHYLLUM	41" DBH	30' DL	RETAIN
31.	WESTERN RED CEDAR	THUJA PLICATA	14" DBH	12' DL	RETAIN
32.	WESTERN RED CEDAR	THUJA PLICATA	30" DBH	20' DL	RETAIN
33.	PREVIOUSLY REMOVED				N/A
34.	PREVIOUSLY REMOVED				N/A
35.	GINKO	GINKO BILOBA	10" DBH	12' DL	RETAIN
36.	THUNDERCLOUD PLUM	PRUNUS CERASIFERA 'THUNDERCLOUD'	14" DBH	12' DL	RETAIN
37.	WESTERN RED CEDAR	THUJA PLICATA	21" DBH	15' DL	RETAIN

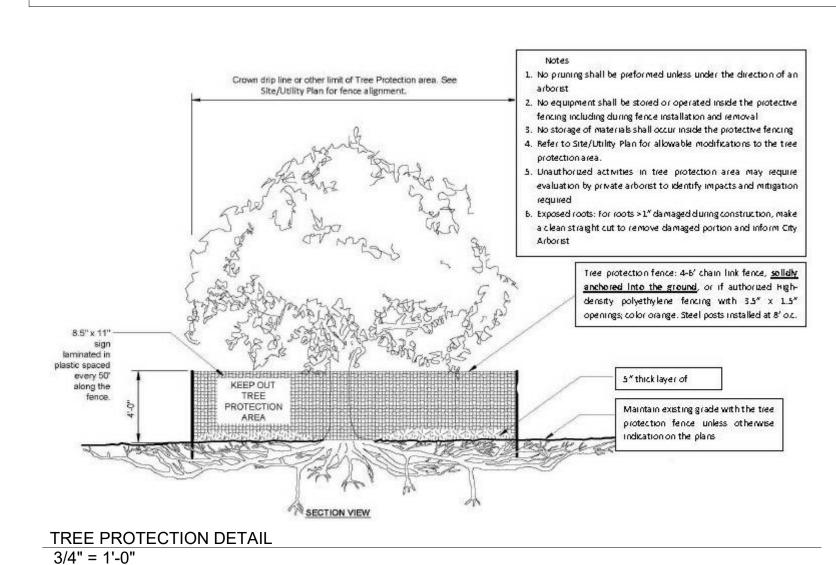
NEW / REPLACEMENT TREES

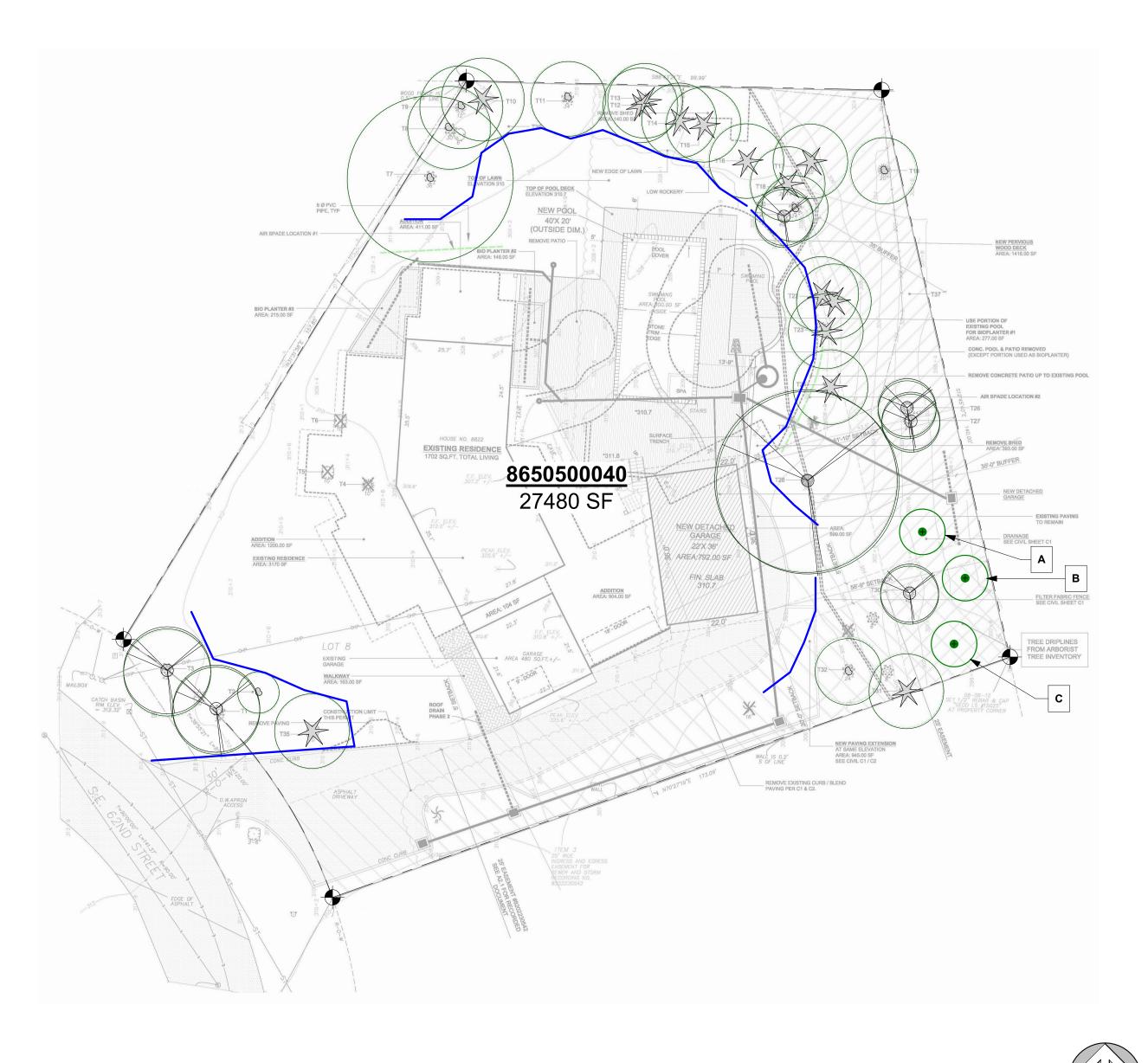
TREE #	TREE TYPE	PLANTED DBH
A. B. C.	WESTERN RED CEDAR THUJA PLICATA WESTERN RED CEDAR THUJA PLICATA WESTERN RED CEDAR THUJA PLICATA (REPLACEMENTS WITH 20' OF SEPARATION OR AS CLOSE TO IT AS POSSIBLE).	8' DRIPLINE 8' DRIPLINE 8' DRIPLINE

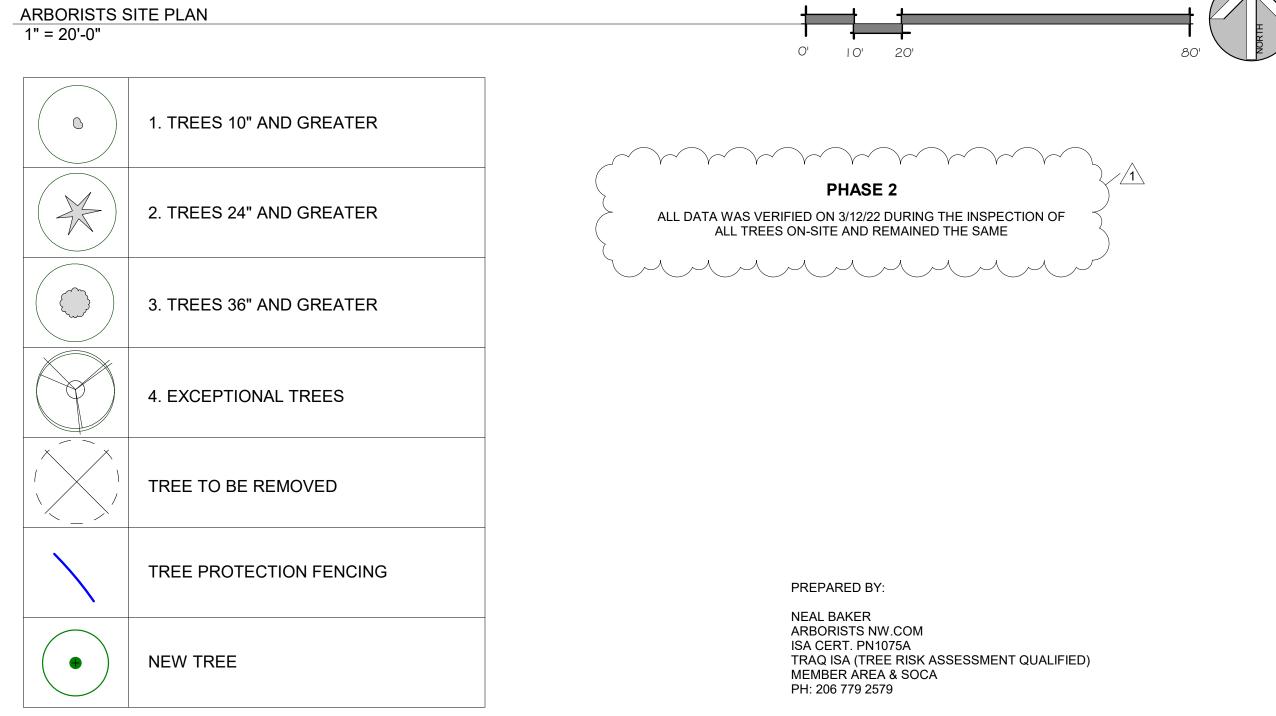
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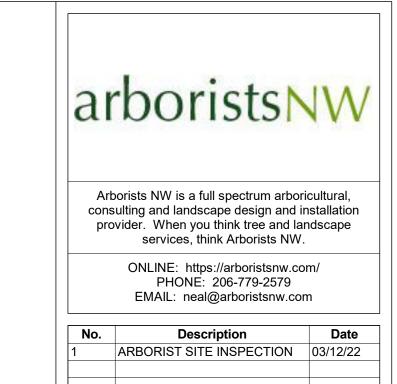
WHEN EXCAVATING FOR THE STORM PIPING THAT IS LOCATED WITHIN A TREES CRITICAL ROOT ZONE, THE EXCAVATION SHOULD BE DONE BY CAREFULLY DIGGING WITH HAND TOOLS OR BY USING AN AIRSPADE. SMALLER ROOTS CAN BE CUT IF NEEDED AND THE PIPING ROUTED AROUND LARGER ROOTS.

-REFER TO WETLAND RESOURCES SHEET 2/2 FOR RE-PLANTING IN THE CRITICAL AREA SPACE.









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HEADRICK RESIDENCE (PHASE 2)

ARBORIST TREE PLAN

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Checked by	AB
Drawn by	CW
Date	4/10/20
Project number	20006

As indicated